

Ambassador College

DEC 29 1977

LIBRARY

THE MANKIND QUARTERLY



AN INTERNATIONAL QUARTERLY JOURNAL
dealing with Race and Inheritance in the Fields of

ETHNOLOGY ETHNO- AND HUMAN GENETICS

ETHNO-PSYCHOLOGY • RACIAL HISTORY

DEMOGRAPHY AND ANTHROPO-GEOGRAPHY

Vol. XVIII, No. 1

July-September 1977

£1.50 • \$3.00

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

IAAEE REPRINTS

FINDINGS ON RACIAL DIFFERENCES BY MODERN SCIENTISTS

These Reprints provide scholars, students and others with easy access to important articles on the race question by leading scientists, originally published in specialized professional journals. Currently available are thirteen titles. Others are in preparation. All are priced at 25 cents a copy, except Nos. 11 and 12 which are 50 cents.

1. KLINEBERG'S CHAPTER ON RACE AND PSYCHOLOGY by Henry E. Garrett.
2. ZOOLOGICAL SUBSPECIES OF MAN by E. Raymond Hall.
3. ON THE NATURE OF PREJUDICE by A. James Gregor
4. ETHNIC GROUP DIFFERENCES by Stanley D. Porteus.
5. THE CONTROL OF EVOLUTION IN MAN by C. D. Darlington.
6. THE EMERGENCE OF RACIAL GENETICS by R. Ruggles Gates.
7. THE RACIAL HISTORY OF SCANDINAVIA by Bertil J. Lundman.
8. SOME NEGLECTED ASPECTS OF THE 'MINORITIES' PROBLEM by George A. Lundberg.
9. THE S.P.S.S.I. AND RACIAL DIFFERENCES by Henry E. Garrett.
10. SOCIAL SCIENCE TESTIMONY IN THE DESEGREGATION CASES: A REPLY TO PROFESSOR KENNETH CLARK by Ernest van den Haag.
11. THE INHERITANCE OF MENTAL ABILITY by Sir Cyril Burt.
12. THE AMERICAN MELTING POT: ITS MEANING TO US by John M. Radzinski.
13. PSYCHODIAGNOSIS, PROGNOSIS, SCHOOL DESEGREGATION AND DELINQUENCY by Clairette P. Armstrong.

Order from:

THE INTERNATIONAL ASSOCIATION FOR THE ADVANCEMENT
OF ETHNOLOGY AND EUGENICS, INC.
P.O. Box 3495, Grand Central Station
New York, N.Y. 10017

Race and Modern Science

Edited, with an introduction, by
Robert E. Kuttner

The sixteen monographs in this four-part volume—anthropology, biology, sociology and psychology—by natural and social scientists, many of whom are internationally known and recognized as authorities in their fields, explore the differences between the races of man. These essays are especially timely as a contribution to the body of modern scientific literature in view of the fact that for a number of years there has been a sustained effort to explain away racial differences as nothing more than the color of the skin. The scientists brought together in this volume present evidence that the races of man differ not only in physical appearance but also psychologically and in various respects biologically.

484 pages \$7.95

The Testing of Negro Intelligence

By Audrey M. Shuey

This new edition of Dr Shuey's important work, first published in 1958, is a thorough revision and updating of the earlier book. The work has been expanded with much new material added. In this new edition Dr Shuey summarizes 382 studies of mental tests given to Negroes and Whites in the United States during the last fifty years. Also included are results of tests of some 1600 Negroes in Ontario and the West Indian islands of Jamaica and Grand Cayman. Upon publication of the first edition Dr Corrado Gini, late president of the International Institute of Sociology, wrote: "... the volume constitutes a milestone in this area. After its publication, the burden of proof rests upon those who reject its conclusions."

578 pages \$6.50

SOCIAL SCIENCE PRESS

310 Madison Avenue, New York, N.Y. 10017

Property of
AMBASSADOR COLLEGE LIBRARY
Pasadena, California

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Etnologia-Antropologia Culturale

(già Rivista di Etnografia-fondata da G. TUCCI)

**Pubblicata sotto gli auspici del Consiglio Nazionale delle
Ricerche**

Vol. I

1974

- ** Unica Rivista Scientifica Italiana dedicata allo studio Etnico-Antropologico di tutti i popoli.
- ** In volumi annui pubblica memorie originali di studiosi specialisti italiani e stranieri e saggi di nuove ricerche.
- ** Pubblica rassegne di aggiornamento su argomenti inerenti discipline affini: sociologia, psicologia, storia del folklore e delle tradizioni popolari, etnomusicologia, antropologia economica, linguistica, etnoiatria.
- ** E' aperta a tutte le scuole senza alcuna preclusione: libera palestra per il potenziamento degli studi Etno-Antropologici italiani nel quadro della vasta e complessa produzione internazionale, seguita da un ampio notiziario ed una vasta Rassegna Bibliografici.

Direttore Responsabile: Prof. Cav. VITTORIO AMEDEO CARAVAGLIOS.

Direzione-Redazione: Prof. PIERO BATTISTA-Dott. GIANFRANCA RANISIO.

L'abbonamento alla Rivista è di £5.50 per l'Italia e £6.50 per l'estero.

Per le rimesse della quota di abbonamento è preferibile servirsi del c/c postale no 6/13000 intestato: Etnologia-Antropologia Culturale: Corso Vittorio Emanuele, 110 (80121 Napoli).

Non si spediscono numeri di saggio

80121 NAPOLI, CORSO VITT. EMANUELE, 110.

Tel. 681629.

VOL. XVIII, No. 1

THE

JULY-SEPTEMBER 1977

MANKIND

QUARTERLY

EDITOR

R. GAYRE OF GAYRE, M.A., D.Phil., Pol.D.Sc., D.Sc.

HONORARY ASSOCIATE EDITORS

Professor MARIO CAPPIERI

Professor FRANK C. J. MCGURK

Professor RICHARD LYNN, M.A., Ph.D.(Cantab.)

FORMER HONORARY ASSOCIATE EDITORS

† **Professor R. RUGGLES GATES, M.A., Ph.D., D.Sc., LL.D., F.R.S.**

† **Professor CORRADO GINI, LL.D., D.Soc., D.Sc., D.Econ., D.Soc.Sc.**

† **Professor HENRY E. GARRETT, Ph.D., D.Sc.**

ASSISTANT EDITORS

ROBERT KUTTNER, B.S., Ph.D.

ROBERT H. S. ROBERTSON, M.A., F.R.S.(Edin.), F.G.S.

HONORARY ADVISORY BOARD

Professor Santiago Alcobé, Barcelona, Spain; Professor P. C. Biswas, Delhi, India; Professor Felix v. Bormann, Bad Nauheim, West Germany; Dr J. C. Carothers, Bedhampton, England; Sir Raphael Cilento, Brisbane, Australia; Professor Alberto Xavier da Cunha, Coimbra, Portugal; Professor Gerrit Daams, Kent, Ohio, U.S.A.; Professor H. J. Eysenck, London; Professor A. P. Elkin, Sydney, Australia; Professor Luigi Gedda, Rome, Italy; Professor Giuseppe Genna, Rome, Italy; Professor Dr E. Hanhart, Zurich, Switzerland; Professor J. D. J. Hofmeyr, Pretoria, South Africa; Professor John L. Horn, Denver, Colorado, U.S.A.; Professor Charles C. Josey, Indianapolis, U.S.A.; Dr Watson Kirkconnell, Wolfville, Canada; Dr Taku Komai, Kyoto, Japan; Professor Bertil Lundman, Uppsala, Sweden; †Professor Branimiro Males, Tucumán, Argentina; Dr Clarence P. Oliver, Austin, Texas, U.S.A.; Professor S. D. Porteus, Honolulu, Hawaii, U.S.A.; Professor Stefan T. Possony, Stanford, California, U.S.A.; Dr David C. Rife, Clewiston, Florida, U.S.A.; Professor Alfredo Sacchetti, Tucumán, Argentina; Professor M. R. Sahni, Punjab, India; Professor Herbert Sanborn, Tennessee, U.S.A.; Professor Heinrich Schade, Düsseldorf, West Germany; †Professor Walter Scheidt, Hamburg, West Germany; Dr John Scudder, New York, U.S.A.; †Professor Sergio Sergi, Rome, Italy; Dr Audrey M. Shuey, Lynchburg, Virginia, U.S.A.; Professor M. J. Sirks, Groningen, Netherlands; Professor Torsten Sjögren, Stockholm, Sweden; †Professor Giovanni Tucci, Naples, Italy; Professor Harry Turnev-High, Columbia, South Carolina, U.S.A.; Professor O. v. Verschuer, Münster, Westphalia, West Germany; Professor H. V. Vallois, Paris, France; Professor E. Peter Volpe, New Orleans, U.S.A.; Dr R. J. Walsh, Sydney, Australia; Professor K. Robert V. Wikman, Abo, Finland.

Published by

THE MANKIND QUARTERLY

1 Darnaway Street, Edinburgh, EH3 6DW, Scotland

CONTENTS

THE DISTRIBUTION OF THE ABO AND RHESUS BLOOD GROUPS AMONG SOUTH MISSISSIPPI ANGLO-SAXON CHILDREN by Donald A. Swan	3
NOTES ON KARL MARX'S RACIAL PHILOSOPHY OF POLITICS AND HEREDITY by Nathaniel Weyl	59
NOTES ON THE LAETOLIL FIND AND PREHOMINID RACIATION by Nathaniel Weyl	71
MAN, APE OR BIG FOOT	73
JOURNALS RECEIVED	74
BOOK REVIEWS	76

Articles appearing in this Journal are abstracted and indexed in
Historical Abstracts and *America: History and Life*

The Distribution of the Abo and Rhesus Blood Groups Among South Mississippi Anglo-Saxon School Children

By DONALD A. SWAN

INTRODUCTION

The distribution of the various blood groups among the different races and peoples of the world is of great interest to anthropologists. Blood groups are completely determined by heredity and have a known mode of inheritance. Hence, the actual blood group gene frequencies in different populations can be calculated. Anthropologists can employ blood group data to measure the genetic differences between races and peoples, construct taxonomies of the races of man, and estimate rates of evolutionary change.

In the autumn of 1975 the Institute for the Study of Man in Washington D.C. undertook an anthropological and psychological study of American school children of Anglo-Saxon origin. Anthropometric data (head and body measurements), pigmentation measures, serological data, dermatoglyphic data, and measures of intelligence and personality were obtained from students at three schools in the South Mississippi area of the United States. The purpose of the study was to assess the anthropological and psychological structure of an American Anglo-Saxon population, to compare this population with parent populations in the British Isles, and to investigate the interrelation between physical and behavioral traits. This article is a preliminary report on one area of the study—the distribution of the ABO and Rhesus blood groups among the children at two of the schools—Sanford Academy and Columbia Academy.*

*The author wishes to express his thanks to Mr David Townsend, the Headmaster of Sanford Academy, and to Mr Jerry Sims, the Headmaster of Columbia Academy, for their co-operation and assistance in the research project. Dr Harold Cruse, Head of the Medical Technology Department at the University of Southern Mississippi and Mr Fred Wilson and Miss Gail Keller of Forrest General Hospital were of great assistance in the blood-typing work. Mrs Sheena Hatchell of Columbia, Mississippi blood-typed the students at Columbia Academy.

BACKGROUND

The ABO blood group system was discovered by Karl Landsteiner in 1901. Dr Landsteiner noted that the mixture of blood from different individuals frequently resulted in biochemical reactions termed "agglutinations". On the basis of his studies Landsteiner found that "human beings could be divided into four classes according to the agglutination reactions which their red cells showed with normal human sera."¹ In the ABO-system two antigens or agglutinable substances were found in the red blood cells and two antibodies or agglutinating substances in the human sera. Later the four classes of reactions were termed blood types O, A, B, and AB.

For individuals of blood type O, neither of the two antibodies—termed anti-A and anti-B—will agglutinate the red blood cells. For those of blood type A, anti-A serum will cause agglutination, but not anti-B serum. For blood type B, the reverse is the case. Anti-B serum will cause agglutination, but not anti-A serum. Finally, for individuals of blood type AB, both antibodies produce agglutination of the red blood cells.²

The genetics of the ABO-system were first correctly worked out by Bernstein in 1924. He found that the four blood types were determined by three allelic genes: p-gene for blood type A, q-gene for blood type B, and r-gene for blood type O. The blood group system exhibits both dominance and blending. Hence, blood types A and B are dominant to blood type O, while $A \times B$ produces blood type AB. Since an A-type individual may be either AA or AO and a B-type individual either BB or BO, there are actually six possible genotypes in the ABO-system. The relation between the genotypes and phenotypes is shown in Table 1.³

Since the r-gene for blood type O is recessive, the actual gene frequency of r in a population will be underestimated if based upon direct tabulation of the ABO phenotypes. Formulas have been worked out for calculating the actual p, q, r gene frequencies from the ABO phenotypes. Mourant (1954), for example, gives the following formulas:

$$\begin{aligned}r &= \sqrt{O} \\p &= \sqrt{A + O} - \sqrt{O} \\q &= \sqrt{B + O} - \sqrt{O}\end{aligned}$$

¹ A. E. Mourant, *The Distribution of the Human Blood Groups*, C. C. Thomas, Springfield, Illinois, 1954, p. 6.

² Gerhard Heberer, Gottfried Kurth and Ilse Schwidetzky. *Anthropology: A to Z*, Grosset and Dunlap, New York, 1959, pp. 166-167.

³ W. C. Boyd, *Genetics and the Races of Man*, Little, Brown and Company, Boston, 1952, pp. 216-217.

An alternative set of gene-frequency formulas derived by the maximum likelihood method is given by Walter (1962):

$$\begin{aligned}p^1 &= 1 - \sqrt{B + O} \\q^1 &= 1 - \sqrt{A + O} \\r^1 &= \sqrt{O}\end{aligned}$$

$$\begin{aligned}p &= p^1 (1 + \tfrac{1}{2} D) \\q &= q^1 (1 + \tfrac{1}{2} D) \\r &= (r^1 + \tfrac{1}{2} D) (1 + \tfrac{1}{2} D)\end{aligned}$$

where: $D = 1 - p^1 - q^1 - r^1$

and: $p + q + r = 1$

The discovery of the ABO-system was followed by the discovery of additional blood group systems. These systems were also based upon the agglutination reactions of the red blood cells to a number of serum antibodies — including some obtained from the sera of animals (rabbits, pigs, horses). Heberer, Kurth and Schwidetzky (1959) noted that 46 hereditary blood characteristics were known at that time. These were attributable to at least 16 gene loci with two or more alleles each.⁴

In addition, it was discovered that the A antigen in the ABO-system could be subdivided into two varieties, A_1 and A_2 . This results in a corresponding subdivision of blood type A into A_1 and A_2 and blood type AB into A_1B and A_2B . Thus, there are a total of six phenotypes and ten genotypes in the ABO blood group system.

The Rhesus blood group system has also been investigated in detail due to its medical importance. According to Mourant (1954), "the Rh blood groups depend upon three very closely adjacent loci on each of a pair of chromosomes, which may be called the C, D, and E loci." Either of the two common alternatives genes D and d can occur at the D locus, or occasionally the rare gene D^u . At the C locus the common C or c genes may occur, or the rarer C^w , C^u , or c^v . At the E locus the common E or e genes can occur, or the rare E^u .⁵

There are specific antisera for antigens D, d, C, c, C^w , E, and e. Most published studies of the Rhesus blood groups of populations, however, employed only the anti-D serum. In this case, if the mixture of anti-D serum with red blood cells causes agglutination, then the individual is classified as Rh+. If there is no agglutination, the individual is classified as Rh-. The

⁴ Gerhard Heberer, Gottfried Kurth and Ilse Schwidetzky, *op. cit.*, pp. 167-168.

⁵ A. E. Mourant, *op. cit.*, pp. 7-8.

frequencies of the genes D and d can then be obtained by the following formulas:

$$d = \sqrt{\% \text{ of Rh-Negatives}}$$

$$D = 1 - d$$

Heberer, Kurth, and Schwidetzky (1959) enumerated nine blood group systems of interest to anthropologists and described their genetic structure as follows:⁶

- (1) *The ABO System* with at least four alleles (A_1 , A_2 , B, O) of one gene locus (multiple allelomorphous relationship); A and B are dominant to O; A_1 is dominant to A_2 , and A and B are of equal dominance.
- (2) *The MN System*: One gene with two alleles M and N, without dominance; thus three traceable phenotypes M, N, and MN; . . .
- (3) *The Rh System*: Three gene loci situated in the same chromosome with at least two alleles Cc, Dd, and Ee and a series of rare mutants (C^w and others) . . .
- (4) *The P Factor*: One gene locus with at least two alleles, with P + dominant to P —.
- (5) *The Lutheran Blood Group*: One gene locus with two alleles, with Lu (a +) dominant to Lu (a —).
- (6) *The Kell Blood Group*: One gene locus with two alleles, with K + dominant to K —.
- (7) *The Lewis Blood Group*: One gene locus with two alleles; here the absence of the antigen Le (a —) is dominant to the presence of Le (a +).
- (8) *The Duffy Blood Group*: One gene locus with two alleles, with Fy (a +) dominant to Fy (a —).
- (9) *The Kidd Blood Group*: One gene locus with two alleles, with Jk (a +) dominant to Jk (a —). . . .

Dr Walter (1962) described a tenth blood group system — the Diego Blood Group. Here, there is one gene locus with two alleles, with Di (a +) dominant to Di (a —). New hereditary blood traits are continually being discovered. Many of these, however, are termed, “private family antigens,” since they are known only from single families.⁷

BLOOD GROUPS AND NATURAL SELECTION

When the blood group systems were first discovered, biologists believed that the distribution of blood type genes was unaffected by environmental selective forces. Hence, blood groups could be considered “nonadaptive traits” that would be stable over time.

⁶ Gerhard Heberer, Gottfried Kurth and Ilse Schwidetzky, *op. cit.*, p. 168.

⁷ Hubert Walter, “Die Bedeutung der serologischen Merkmale für die Rassenkunde,” in Ilse Schwidetzky (Editor), *Die neue Rassenkunde*, Gustav Fischer, Stuttgart, Germany, 1962, pp. 207-211.

Later researchers, however, began to investigate the relation between blood group system and possible differential survival or fertility of individuals. The discovery of the Rhesus system was a direct result of research into the hemolytic disease caused by incompatibility between the Rh types of a mother and her fetus. This in turn led to studies of the possible relation between blood groups and differential susceptibility or resistance to a number of diseases.⁸

Dr Walter (1962) summarized the data from a number of studies investigating the statistical association between ABO blood type and nine different diseases (See Table 2). For example, 23 studies on 6795 patients with stomach cancer found a 19 per cent higher incidence in individuals of blood type A as compared to individuals of blood types O and B. Thirty-five studies on 8416 subjects with duodenal ulcers found a higher incidence ranging from 35 per cent to 41 per cent in individuals of blood type O as compared to those of blood types A, B, and AB.⁹

More recently scientists have begun to investigate the possible relation between blood type and behavioral traits. Cattell (1964), for example, administered his 13-factor High School Personality Questionnaire to a sample of 581 Italian and Italo-American male students, who had been blood typed for the ABO-system. He found a statistically significant association between ABO blood type and Personality Factor I ("tender-minded" vs. "tough-minded"), with those individuals of blood type A more "tender-minded" than those of blood types O, B, or AB.¹⁰

RACE AND BLOOD GROUP

During the First World War (1914-1918) large numbers of soldiers from many different nations were blood-typed for medical purposes. While working in Greece and Macedonia at this time, Dr and Mrs Hirsfeld noted that the frequencies of the ABO blood types differed among the various nationalities tested during the war. Their paper on the subject, "Serological Differences between the Blood of Different Races," was published in 1919 and initiated the new science of seroanthropology.¹¹

In the course of the following half century millions of subjects in all parts of the world have been blood typed. For some blood

⁸ John Buettner-Janusch, *Origins of Man*, John Wiley, New York, 1966, pp. 504-506.

⁹ Hubert Walter, *op. cit.*, pp. 157-161.

¹⁰ Raymond B. Cattell, "Blood Groups and Personality Traits," *American Journal of Human Genetics*, Vol. 16, No. 4, 1964, pp. 397-402.

¹¹ Hubert Walter, *op. cit.*, pp. 135-140.

groups, such as the ABO-system, serological studies have been conducted on samples of most of the races and peoples of the world. Summaries and tabulations of these studies have been provided by Boyd (1952), Mourant (1954), Saller (1962),¹² and Schwidetzky (1962).

Sufficient serological data have been accumulated to permit the compilation of blood type gene frequency maps and the construction of racial classification systems based upon serological traits. Boyd (1952) employed data from three blood group systems (ABO, Rhesus, and MN) and identified six serological races. These were: (1) Early European group (represented by the living Basques); (2) European (Caucasoid) group; (3) African (Negroid) group; (4) Asiatic (Mongoloid) group; (5) American Indian group; and (6) Australoid group.¹³

Boyd (1963) subsequently modified his classification system to incorporate data from additional blood group systems. He now obtained thirteen serological races within seven major geographical groups.¹⁴ These were:

A. EUROPEAN GROUP. Common Traits: the highest frequencies of cde (r) and relatively high CDe (R₁); relatively high A₁ and above all A₂; "normal" MN-distribution; S is present and generally associated with M; Fy, V, and Diego are absent.

1. *Early European*. Highest frequency of cde (r), no B; CDe and A₁ are relatively high in frequency.

2. *Lapp*. Highest N value in Europe, high frequency of Fy^a, low B and very high A₂; cde (r) relatively rare, CDe (R₁) above average, and cDe (R₂) high in frequency.

3. *Northwest European*. High frequency of A and low of B; normal MN-frequencies; next to the Lapps the highest frequency of A₂; next to the Basques and some smaller isolates the highest frequency of cde (r).

4. *East and Central European*. Higher frequency of blood type B (more than 0.1); M somewhat higher and cde (r) somewhat lower than in Northwest Europe.

5. *Mediterranean (including North Africa and Egypt)*. Blood type B more frequent than in Northwest Europe; cde (r) somewhat lower and cDe (R₂) higher in frequency, "which indicates affinities to the Africans."

¹² Rudolf Martin and Karl Saller. *Lehrbuch der Anthropologie*, Gustav Fischer, Stuttgart, Germany, 1962, Vol. III, pp. 1575-1750.

¹³ W. C. Boyd, *op. cit.*, pp. 268-273.

¹⁴ W. C. Boyd, "Genetics and the Human Race," *Science*, Vol. 140, No. 3571, 1963, pp. 1057-1065.

B. AFRICAN GROUP. (The populations of Africa are divided into "North Africa and Egypt," which is linked to the Mediterranean races, and "Black Africa.")

6. *African Race*. Enormously high frequency (0.5 to 0.9) of cDe (R_0), Fy and V very high infrequency; low frequency of CDe (R_1), high P; A_2 next highest frequency to the Europeans; relatively high frequency of B, but not as high as in Asia.

C. ASIAN GROUP.

7. *Asiatic Race*. High frequencies of blood types A_1 and B, but little or no A_2 ; very low frequency of cde (r); normal MN-distribution, S relatively rare; more than Fy^a than in Europe, K rare.

8. *Indo-Dravidian Race*. cde (r) lower in frequency than in Europe; very high frequency of blood type B, relatively high M; S present and more frequently combined with M than in Europe.

D. AMERICAN GROUP. Possible serological differences between North American and South American Indians, but data not yet sufficient to establish such classificatory subdivisions. The Eskimos are here included with the "Indian Race."

9. *Indian Race*. Sharply differing frequencies of A_1 between tribes, but no A_2 or B. Very high frequency of M; S present, more frequently combined with M than with N; highest frequencies of cDE (R_2) while cde (r) is lacking; cDe (R_0) rare; high frequencies of the Diego-Factor.

E. PACIFIC GROUP. In addition to the Australian aborigines, three population groups are distinguished on the basis of serological traits.

10. *Indonesian Race*. As a rule, relatively high frequencies of A_1 and B, but no A_2 ; frequencies of M between 0.6 and 0.4, S present. Only four Rh-types appear to be present, namely CDE (R_1), cDE (R_2), cDe (R_0), and CDE (R_z), with a strong pre-dominance of R_1 .

11. *Melanesian Race*. Somewhat higher frequency of A_1 and above all higher B than among the Indonesian race, but no A_2 . Variable but mostly low frequencies of M; S present, but lower in frequency than in India. Same four Rh-types as in Indonesia, with high frequency of CDE (R_1) and low of cDe (R_0); high Jk^a. The sickle-cell gene is absent.

12. *Polynesian Race*. High frequency of A_1 , very low of blood type B. Relatively high M; S present, mostly combined with N. Only three Rh-types present, namely CDe (R_1) cDE (R_2), and cDe (R_0), with almost equal frequencies of R_1 and R_2 and less

of Ro. Relatively high P; lower Fy^a than in the other Pacific races.

13. *Australian Race*. High frequency of A₁, but no B. Low frequency of M and almost no S, which differentiates the Australian aborigines from the other Pacific races. Among the Rh-types, CDe (R₁) predominates; high frequency of CDE (R₂), but no cde (r). No Lu^a, low P; apparently no K, and no sickle-cell gene.

Boyd's (1963) modified classificatory system resembles those racial classification systems advanced by morphological anthropologists employing traditional sorting criteria of skin color, hair form, and so on. There are two notable differences. Boyd groups together the Negroids (Negroes and Pygmies) and Capoids (Bushmen and Hottentots) into one African race on the basis of similarity in serological traits. He also separates the East Asian Mongoloids and the American Indians into two distinct races on the basis of dissimilarity in serological traits.

Carleton Coon (1965) explained these differences between morphological and serological classificatory systems in terms of the resistance to certain diseases by some blood-group substances. Consequently, the similarity in blood groups of the Bushmen and Negroes, despite their morphological differences, would be a result of their exposure to the same African diseases. On the other hand, the simpler and more uniform blood-group pattern of the American Indian could be due to the cold screening out "the genes for resisting diseases common in warmer places," when their ancestors crossed the Bering Strait.¹⁵

Dr Walter has provided a more comprehensive survey of the relation between serological traits and race in Professor Ilse Schwidetzky's work *Die neue Rassenkunde* (1962). Walter has mapped the global distribution of the serological gene frequencies, compiled tables of the serological studies of different populations, and summarized the serological differences between seven major racial groups for each of the ten blood group systems listed earlier.

For the ABO-system, Dr Walter concluded that on the basis of the tabular and graphic compilations "distinct differences exist between the races in the frequency of the different blood group genes." These racial differences are illustrated in Figure 1 and outlined in Table 3.

As can be seen from the tables and charts, the frequency of the p-gene for blood type A is higher among both European and non-European Whites, Eskimos, and Australian aborigines. On

¹⁵ Carleton S. Coon, *The Living Races of Man*, Alfred A. Knopf, New York, 1965, p. 268.

the other hand, the p-gene frequency is low among East Asian Mongoloids, American Indians, and African Negroids. The q-gene for blood type B attains its highest frequency among the Mongoloid peoples of East Asia and its lowest frequency among the American Indians and Eskimos. The r-gene for blood type O reaches its highest frequency among the American Indians, with high values also found among Eskimos and African Negroes.¹⁶

Dr Walter also provided quantitative estimates of the distribution of the ABO gene frequencies in each of seven primary racial groups. These data are presented in Table 4. For the Caucasoid populations of Europe, the distribution is calculated at: $p = .26$, $q = .12$, and $r = .62$. This would correspond to a phenotypic distribution of approximately 40 per cent type O, 40 per cent type A, 16 per cent type B, and 4 per cent type AB.

The distribution of the Rhesus blood group genes also shows significant geographical and racial differences. These data are presented in Figure 2. The D gene for Rh-positive attains its highest frequency among the Eskimos, the Mongolid peoples of East Asia, the American Indians and the Australian aborigines. In some samples of populations from these four racial groups, all individuals have been found to be Rh-positive. In contrast, the highest frequency of Rh-negative individuals is found among the peoples of Europe.

The distribution of the C and E genes of the Rhesus blood group system also show sharp geographical and racial differences. Frequencies of 80 per cent or higher for the C-gene are found among the Australian and Melanesian aborigines, with high frequencies also found among the Eskimos and the Mongolid peoples of East Asia. On the other hand, C-gene frequencies of 20 per cent or less are found among most African Negro peoples. The E-gene also attains its lowest frequency among the African Negroes and its highest frequencies among the American Indians and Eskimos.

Furthermore, the frequency of the Rh-gene combinations also exhibit "characteristic differences between the primary races." These data are also presented in Figure 2. The gene combination cde (r), for example, attains its highest frequency among the peoples of Europe, while the same gene-combination is very rare among the American Indians, the Eskimos, and the Mongolid peoples of East Asia. The gene-combination cDe (R₀) is found in high frequency only among the African Negroids, with higher frequencies the more Negrid the population. Dr Boyd terms this gene-combination "the African-chromosome."¹⁷

¹⁶ Hubert Walter, *op. cit.*, pp. 140-154.

¹⁷ Hubert Walter, *op. cit.*, pp. 183-184.

THE ABO AND RHESUS BLOOD GROUPS IN EUROPE

In addition to the blood group distribution differences *between* the primary races of man, serological differences have also been found between populations *within* these races. This is particularly evident in the case of Europe, where serological studies have been conducted on most of the populations of the continent. Dr Walter (1962) has summarized the data from 46 studies of the distribution of ABO-blood types in European populations. These data are presented in the appendix to this article.

The p-gene for blood type A in the ABO-system attains its highest frequencies in Scandinavia and Finland, as well as in several central and south European regions. Serological studies of population samples from Norway, Denmark, Sweden, Holland, Belgium, France, Germany, Switzerland, Austria, Spain, and Portugal generally find 40 per cent or more of the subjects to be of blood type A. Lower p-gene values are found in the most distant parts of northwestern and eastern Europe, together with southern Italy and the Mediterranean islands (especially Sardinia). The European minimum is found in western Ireland, with a gene frequency of less than .15.

Dr Lundman (1967) noted that low p-values for blood type A are found in several refuge areas of Europe — “among the Basques, in the marsh and moor regions of the Netherlands, in the Po delta region of northeastern Italy, and in some forest regions of central Sweden.” He concludes that large parts of western Europe may have had lower p-gene frequencies in pre-historic times. The higher p-gene frequencies could possibly have been diffused in later times by migrations of Indo-European peoples.¹⁵

The r-gene for blood type O attains its highest European frequencies in the westernmost part of the continent—especially in western Ireland. High frequencies are also found among the Icelanders, Scotch, Basques, and Sardinians. The r-gene frequencies decline in eastern Europe. Serological studies of population samples from Poland, Czechoslovakia, Hungary, and Russia indicate that only 30 per cent to 36 per cent of these peoples are of blood type O.

The q-gene frequencies for blood type B increase to the east of the Finnish-Scandinavian and German-Slavic linguistic boundaries. Thus, studies of population samples from Finland, the Baltic States, Poland, Czechoslovakia, Russia, Hungary, and Rumania show percentages of blood type B ranging from 17 per cent to 25 per cent.

The distribution of the D-gene in the Rhesus blood group

¹⁵ Bertil Lundman, *Geographische Anthropologie*, Gustav Fischer Verlag, Stuttgart, Germany, 1967. pp. 100-102.

system is fairly uniform in Europe north of the Pyrenees. From the British Isles in the west to Russia in the east approximately 16 per cent to 18 per cent of the populations sampled are Rh-negative. Low frequencies of Rh-negative individuals are found in Spanish Galicia, Sardinia, and among the Lapps. The highest frequencies of Rh-negative individuals in Europe—and in the world—are found among the Basques of Spain and France. The Basques are also distinguished by the lowest frequency of blood type B in Europe, while the Scandinavian Lapps have the world's highest known frequency of the rare A₂ blood type.¹⁹

THE ABO AND RHESUS BLOOD GROUPS IN THE BRITISH ISLES

In his survey of blood group data from throughout the world, Mourant (1954) found that in Great Britain and Northern Ireland the frequencies of the p-gene for blood type A and the r-gene for blood type O were somewhat higher than the total world averages, while the frequency of the q-gene for blood type B was markedly lower. These data are presented in Table 5.

Dr Mourant also reported significant differences in the blood group distributions within the British Isles. In part, these serological differences separate the "Germanic" English from the "Celtic" Welsh, Scots, and Irish. Thus, in England the frequency of blood type A is higher and that of blood type O lower than in most of Wales, Scotland, and Ireland. These same regions have a "slightly but significantly higher frequency" of blood type B as compared to that found in England. Within England "there is a slight but definite fall in A and rise in O frequency from south to north, and this trend is continued northward through most of Scotland."²⁰

Mourant and Watkin (1952) employed ABO and Rhesus blood group data in their study of the anthropological history of Great Britain—especially Wales. They also investigated possible "correlations between the distribution of the blood groups and the findings of historians, prehistorians and philologists." Local variations in the percentages of the ABO blood types in the more isolated and mountainous region of Wales were considered to be the result of successive waves of migrants from the continent of Europe to Britain. These migrants would have differed in physical appearance, language, and culture.²¹

On the remoter moorlands and in the Black Mountain area

¹⁹ *Ibid.*

²⁰ A. E. Mourant, *op. cit.*, pp. 44-45.

²¹ A. E. Mourant and I. Morgan Watkin, "Blood Groups, Anthropology and Language in Wales and the Western Countries," *Heredity*, Vol. 6, 1952, pp. 13-35.

of Carmarthenshire in Wales, higher frequencies of blood type B (15 to 25 per cent) and lower frequencies of A—as compared to England—were found. Physical anthropologists, such as H. J. Fleure (1923), had previously suggested that the population of these areas of Wales appeared to be derived from the earliest migrants to Britain in the late Palaeolithic period.²² Mourant and Watkin also concluded that “a high B wave entered Wales” before the other populations.

Apart from these isolated moorlands, north and central Wales is characterized by a high frequency of blood type O (55 per cent), moderate B, and low A—as compared to England. These are the areas of Wales where Fleure postulated “the existence of a good foundation of early neolithic stock—a stock into which earlier population components had very probably been assimilated.” Mourant and Watkin also noted the similarity of this ABO blood type combination to those found among the White populations of the Mediterranean region, including the Berbers of North Africa. They further contended that pre-Aryan syntactic elements in the Celtic languages—with language structural similarities to the Hamitic family—supported the view that “the early inhabitants of Western Britain had strong White North African affinities.”²³

The higher frequencies of blood type A in Pembrokeshire in southwestern Wales, in Cheshire to the north, and around two coastal areas of Wales were attributed to Scandinavian settlements in the Viking Age. The coalfields and the principal cities of South Wales, as well as Monmouthshire to the southeast, have received large numbers of migrants from England over the past few hundred years. These migrations have altered the population structure of southern Wales. This is reflected in the distribution of the ABO blood types in the region, which resemble those found in adjacent areas of England.²⁴

In 1970 Dr Ada C. Kopec published her survey of *The Distribution of the Blood Groups in the United Kingdom*. This study, which took nearly twenty years to complete, presents ABO and Rhesus blood group data from 477,806 subjects in England, Scotland, and Wales and 66,205 subjects in Northern Ireland. The subjects were consecutive new donors who were blood-typed at the Regional Centres of the National Blood Transfusion Service. Approximately 1 per cent of the British population is included in the survey.

²² H. J. Fleure, *The Races of England and Wales*, Benn Brothers, London, 1923, pp. 103-104.

²³ A. E. Mourant and I. Morgan Watkin, *op. cit.*, p. 22 and p. 32.

²⁴ I. Morgan Watkin, “Blood Groups in Wales and the Marches,” *Man*, Vol. 52, No. 122, 1952, pp. 83-86.

Dr Kopec tabulated and analyzed her blood group data in a variety of ways: (1) 19 broad geographic regions of Great Britain, based on the location of the regional centers of the National Blood Transfusion Service; (2) 1096 unit areas in Great Britain and 60 unit areas in Northern Ireland, compiled from post towns and postal districts containing 100 or more blood donors; (3) 39 areas of Great Britain and 9 areas of Northern Ireland homogeneous with respect to blood types O, A, and B + AB; (4) sub-regions and areas homogeneous with respect to one of the ABO blood types.²⁵

The distribution of the ABO phenotypes in 19 geographic regions of Great Britain is presented in Table 6. The regions are listed from north to south. They comprise the cities in which the regional centers of the National Blood Transfusion Service are located, together with the surrounding countryside of these administrative regions.

Dr Kopec's tabulation confirms previous findings of an increase in the frequency of blood type O and a decrease in that of blood type A as one proceeds northwards and westwards in Great Britain. Hence, in Scotland the frequencies of O and B are higher and that of A lower in comparison to the frequencies found in England.²⁶

Statistical tests (chi-square) of these regional data, however, indicate considerable heterogeneity within the 19 regions. In some areas of Britain this heterogeneity is due to recent Irish immigration. In the city of Glasgow, for example, nearly 15 per cent of the population is Irish-born. Separation of the blood donors in Glasgow on the basis of surnames shows a significantly higher frequency of blood type O and lower frequency of blood type A among those with Irish names. The ABO-distribution in a sample of 1159 subjects with Irish names was: O = 59.88%, A = 26.83%, B = 10.44%, and AB = 2.85%, while the distribution among 8198 subjects of "other" names (primarily Scotch) was: O = 52.12%, A = 33.75%, B = 10.93%, and AB = 3.2%. A higher frequency of blood type O and lower of blood type A was also found among subjects with Irish surnames in Liverpool, England. Here, individuals with Scotch and Welsh surnames were intermediate between the Irish and English in the distribution of the ABO blood types.²⁷

Dr Kopec then attempted "to establish the existence, and define the geographic limits, of populations each homogeneous

²⁵ Ada C. Kopec, *The Distribution of the Blood Groups in the United Kingdom*, Oxford University Press, London, 1970, pp. 1-10 and p. 79.

²⁶ Ada C. Kopec, *op. cit.*, p. 92.

²⁷ Ada C. Kopec, *op. cit.*, pp. 38-40 and p. 48.

with regard to all three ratios"—i.e., the frequencies of blood types O, A, and B + AB. This was accomplished by grouping together unit areas to form larger areas and sub-regions internally homogeneous for one or more of the ABO blood types. In this manner a framework was constructed for the analysis of geographical differences in the distribution of blood groups within Great Britain and Northern Ireland.²⁸

Dr Kopec found 39 areas in Great Britain and nine areas in Northern Ireland homogeneous with regard to the frequencies of the O, A, and B + AB phenotypes. The 39 areas of Great Britain are depicted on Map 8 and the 9 areas of Northern Ireland on Map 12. The distribution of the ABO phenotypes in the 39 areas of England, Wales, and Scotland is presented in Table 7. The distribution of the gene-frequencies for blood-type genes p, q, and r in these areas is presented in Table 8. Tables 9 and 10 present the same data for Northern Ireland.

Maps 9, 10, and 11 illustrate the areas of England, Scotland, and Wales homogeneous with regard to blood types O, A, and B + AB considered separately. The frequencies of each of the ABO blood types in these homogeneous areas are listed on the maps. Maps 13, 14, and 15 present the same data for Northern Ireland.²⁹

These maps and tables depict even more clearly the serological differences between England, Wales, Scotland, and Ireland. In southeastern England (Area 21), for example, we find the lower frequency of blood type O and higher frequency of blood type A (O = 43.84%, A = 44.79%, B = 8.21% and AB = 3.16%). For northern and central Wales (Area 13), the frequency of O increases and A decreases (O = 48.57%, A = 37.60%, B = 10.44%, and AB = 3.4%). In the highlands of northern Scotland (Area 1), one finds a slightly higher percentage of O, a lower percentage of A, and the highest frequency of B of any area in either Great Britain or Northern Ireland (O = 49.82%, A = 30.77%, B = 15.38%, and AB = 4.03%).³⁰

Even higher frequencies of blood type O and still lower frequencies of blood type A are found in Northern Ireland. For all nine areas of Northern Ireland the distribution of ABO blood types is: O = 54.74%, A = 32.97%, B = 9.65%, and AB = 2.64%. This compares with a combined distribution for the thirty-nine areas of Great Britain of: O = 46.80%, A = 41.38%, B = 8.73%, and AB = 3.10%. Within Northern Ireland the highest frequencies of blood type O are found in the two

²⁸ Ada C. Kopec, *op. cit.*, pp. 29-31.

²⁹ Ada C. Kopec, *op. cit.*, pp. 86-95 and pp. 101-106.

³⁰ Ada C. Kopec, *op. cit.*, pp. 86-87.

areas with the highest proportion of Irish Catholics in the population. These two areas are Londonderry (O = 56.06%, A = 30.59%, B = 10.39%, and AB = 2.96% and southern Down (O = 57.26%, A = 29.34%, B = 10.93%, and AB = 2.47%).³¹

From the fifth to the eighth centuries A.D. Britain was invaded and settled by Germanic peoples from the adjacent areas of continental Europe—Holland, northwestern Germany, and Denmark. The invaders comprised a number of related peoples—Saxons, Angles, Jutes, and Frisians. Over the course of time the languages of the invaders developed into English and the kingdom of England was established as a political unit.³²

The establishment of Germanic peoples in an island which had previously been Celtic changed to some degree the population structure of the country. The effects would have been greatest in the southern and eastern areas of Britain, since these were the primary regions of Anglo-Saxon invasion and settlement. Comparison of the ABO blood group distributions in these regions of England with the distributions among the Germanic peoples of northwestern Europe can provide some estimate of the magnitude of these population movements.

Table 11 lists the distribution of ABO phenotypes in six regions of West Germany.³³ The Appendix compiled by Dr Walter provides ABO data for Denmark, Holland, and Westfalia in western Germany. For Denmark, the ABO distribution in a sample of 7488 subjects was: O = 43.0%, A = 43.0%, B = 10.5%, and AB = 3.5%; for Holland, the distribution in a sample of 3085 subjects was: O = 45.7%, A = 41.2%, B = 9.6%, and AB = 3.5%; and for Westfalia, the distribution in a sample of 9310 subjects was: O = 42.1%, A = 44.6%, B = 9.7%, and AB = 3.6%.³⁴ Similar distributions are found throughout England, such as Suffolk (O = 44.46%, A = 44.84%, B = 7.61%, and AB = 3.09%) and Sutton (O = 43.84%, A = 44.84%, B = 8.21%, and AB = 3.16%). In fact, the ABO blood group distributions in many areas of England, especially in the south and the east, are closer to the blood group distributions of adjacent areas of Germanic Europe than to the Celtic regions of the British Isles—i.e., Wales, Scotland, and Ireland.

Tables 12 and 13 present the distribution of Rhesus negative

³¹ Ada C. Kopec, *op. cit.*, pp. 103-105.

³² Peter H. Blair, *An Introduction to Anglo-Saxon England*. Cambridge University Press, Cambridge, 1970, pp. 1-54.

³³ Hubert Walter, A. Arndt-Hanser, and C. Ropartz. "Anthropologische Untersuchungen in Rheinland-Pfalz: Die Verteilung der serologischen Merkmale." *Homo*, Vol. XXVI, No. 1, 1975, pp. 35-42.

³⁴ Hubert Walter, *op. cit.*, pp. 144-145.

blood types in Great Britain and Northern Ireland. The mean frequency of Rh-negative individuals in all Great Britain is 18.26 per cent. Regional differences are also found in the frequencies of the Rhesus blood types. Lower Rh-negative frequencies are found in Wales and in areas of Liverpool and Glasgow inhabited by Welsh and Irish populations. Dr Kopec concluded that in Northern Ireland the frequency of Rh-negative individuals "is lower than in England and Scotland, but probably higher than in the Irish Republic and Wales."³⁵

THE ABO AND RHESUS BLOOD GROUPS AMONG SOUTH MISSISSIPPI ANGLO-SAXON SCHOOL CHILDREN

From the early seventeenth century to the end of the eighteenth century—a period of some 150 years—that part of North America which was to become the new American nation was settled by large numbers of migrants from Europe. The settlers were primarily from the British Isles, with smaller contingents of other Europeans, "such as the Spanish, French, Dutch and Swedes, to whom, before the end of the eighteenth century, were added some Germans. . . ." According to Ales Hrdlicka (1925), "the British colonists were mainly English and later 'Scotch-Irish,' with the Scotch, Irish and Welsh in smaller proportions."³⁶

The first American census of 1790 provided the names of the heads of the families enumerated in that census. Later scholars have attempted to estimate the ethnic or national composition of the American people at that time on the basis of these family names and other data. In his classic study of the physical anthropology of the descendants of the early settlers, Dr Hrdlicka estimated that of the 3,172,444 White Americans in 1790, 2,605,699 or 82.1 per cent were of English (or Welsh) origin, 221,562 or 7.0 per cent were of Scotch origin, and 61,534 or 1.9 per cent were of Irish origin. These data are presented in Table 20.³⁷

The English settlers were fairly evenly distributed throughout the original 13 colonies, except for Pennsylvania where they were somewhat underrepresented. Some of the other national groups, however, were heavily concentrated in one or two colonies. More than 89 per cent of the Dutch colonists had settled in New York. Between 1790 and 1820 immigration from Europe to America was relatively small and of essentially the

³⁵ Ada C. Kopec, *op. cit.*, pp. 107-142.

³⁶ Ales Hrdlicka, *Old Americans*, Williams and Wilkins, Baltimore, 1925, p. 1.

³⁷ Ales Hrdlicka, *op. cit.*, pp. 8-11.

same national composition as the earlier migrations. After 1830, however, "the numbers of immigrants began materially to increase and their nationalistic character to change. . . ."³⁸

Madison Grant in his classic study of the racial history of the United States of America—*The Conquest of a Continent* (1933)—provided much valuable information on the ethnic and national elements who settled the original 13 colonies and the subsequently formed states further to the west. The Puritan migrants to New England, for example, were almost purely English. The bulk of the Puritans, who were primarily yeomen and artisans, came from their strongholds in eastern and southern England—East Anglia and Wessex.³⁹

The settlement of Virginia was more diverse than that of New England. Many Royalist families settled in the tidewater region of Virginia during the period of Cromwellian rule in England (1640-1660). This group of settlers furnished many of the leading families of Virginia—the Randolphs, Carys, Parkes, Robinsons, Marshalls, Washingtons, and Ludwells. According to Grant, the Royalists "came from practically all over England and Scotland." Since most of the other early migrants to eastern Virginia also came from England, by 1790 Virginia "was pure English in the tidewater district, that is, as far west as Richmond."⁴⁰

Northern and western Virginia was settled by Ulster Scots (i.e., the so-called "Scotch-Irish" or Irish Protestants of recent English and Scottish origin) coming down through Pennsylvania into the Shenandoah Valley region. In the view of Madison Grant, "the great movement of Ulster Scots to America . . . has been perhaps second only to that from the English counties in its influence on the subsequent history of the continent."⁴¹

North Carolina was also settled by English in the eastern coastal region and by Ulster Scots in the western mountainous areas, "except that the Ulster Scots were relatively more numerous." In addition, large numbers of Scottish Highlanders emigrated to North Carolina following the failures of the 1715 and 1745 uprisings and the breakup of the clan system.⁴²

According to Madison Grant, "South Carolina had an English planter aristocracy and was much purer English and had less Ulster Scotch than her northern neighbor." There was also

³⁸ Ales Hrdlicka, *op. cit.*, pp. 8-10 and p. 15.

³⁹ Madison Grant, *The Conquest of a Continent*, Charles Scribners, New York, 1933, pp. 81-101.

⁴⁰ Madison Grant, *op. cit.*, p. 80 and pp. 130-138.

⁴¹ Madison Grant, *op. cit.*, pp. 93-94.

⁴² Madison Grant, *op. cit.*, p. 80 and pp. 138-141.

a substantial French Huguenot element in South Carolina, "by far the largest and most influential in the colonies." Georgia was described as being "substantially of the same racial complexion as South Carolina."⁴³

Alabama and Mississippi had virtually no American settlement until after the Revolutionary War. In 1798 the territory of Mississippi was formed, which comprised the present-day states of Alabama and Mississippi. Subsequently, there was a movement of settlers from the adjoining states to the east and north. This movement increased substantially after the successful conclusion of the war with the Creek Indians in 1814 opened more land to settlement. More than 100,000 people located in Alabama within five years.⁴⁴

The large majority of the settlers of Alabama and Mississippi prior to 1860 came from the neighboring southern states of Virginia, North and South Carolina, Georgia, and Tennessee. These people were almost entirely of "Scotch and English blood." By 1860 the White population of Mississippi had grown to nearly 400,000. About 8000 of these people were foreign born, mainly Irish.⁴⁵

In the 60 years following the end of the American Civil War in 1865, millions of Europeans migrated to the United States. After 1890 the majority of these migrants came from southern and eastern Europe. These new immigrants greatly altered the population structure in many northeastern and midwestern American states. The southern states, however, were far less affected by these later migrations. Thus, Madison Grant in 1933 could write that the Whites of Mississippi "are almost all of the old native stock."⁴⁶ There has been little change in the ethnic composition of the White population of Mississippi in the succeeding forty years.

The subjects from whom the blood group data were obtained are all students at two private academies in southern Mississippi. All the students are White or Euro-American and virtually all are of English, Scottish and Scotch-Irish origin. Almost all are Protestant in religious background, with the majority of the Baptist denomination. Both academies are located in predominantly rural areas of Mississippi. However, the occupations of the parents represent a cross-section of the American economy—farmers, construction workers, clerical workers, teachers, engineers, doctors, lawyers, small businessmen, and so on. The

⁴³ Madison Grant, *op. cit.*, p. 80.

⁴⁴ Madison Grant, *op. cit.*, pp. 183-185.

⁴⁵ *Ibid.*

⁴⁶ Madison Grant, *op. cit.*, p. 243.

students are middle-class to upper-middle-class in socio-economic status.

Table 14 presents the distribution of the ABO phenotypes found among the school children at the two academies. The high percentage of blood type A, which is characteristic of north and central European populations, is found at both schools. 42.3 per cent of the Columbia Academy students and 44.0 per cent of the Sanford Academy students are of blood type A. A somewhat higher percentage of blood type O (50 per cent) and lower percentage of blood type B (1.5 per cent) is found at Sanford Academy as compared to Columbia Academy where 45.3 per cent of the students are of blood type O and 8.3 per cent of blood type B. The distribution of the frequencies for the p, q, and r genes in the ABO-system is presented in Table 15.

The distribution of the Rhesus blood types is presented in Table 16. 19.0 per cent of the Columbia Academy students and 9.1 per cent of the Sanford Academy students are Rh-negative. For the two schools combined, 79 of 451 students—or 17.5 per cent—are Rh-negative. This is within the 16 to 18 per cent range of Rh-negative individuals found in British and other north and central European populations. The distribution of the Rhesus gene frequencies is presented in Table 17.

The interrelation between the ABO and Rhesus blood group systems is shown in Table 18. For the two academies combined, there is a somewhat lower frequency of Rh-negative individuals among those subjects of blood type O (15.4 per cent) as compared to those of blood types A (19.1 per cent), B (18.2 per cent), and AB (21.0 per cent). However, the differences are not statistically significant.

The combined distribution of the ABO phenotypes among the 452 subjects blood types at both Sanford and Columbia Academies is: O = 46.0%, A = 42.5%, B = 7.3%, and AB = 4.2%. Table 19 presents a comparison of this ABO distribution with ABO distributions found in selected areas of England, Wales, Scotland, and Northern Ireland. As can be seen from the table, the ABO distribution of the Sanford and Columbia Academy students is virtually identical with the distributions found in central, eastern, and southern England. On the basis of these comparative ABO distributions, it appears that the students at Sanford and Columbia Academies in south Mississippi are predominantly of English origin, rather than Scots or Scotch-Irish. It would be interesting to obtain blood group data from samples of north Mississippi subjects, who are by tradition more Scotch-Irish in ancestry.

SUMMARY

The distributions of the known human blood groups are of great interest to anthropologists and population geneticists. Blood groups are completely determined by heredity and have a known mode of inheritance. Consequently, blood group data can be employed by anthropologists to measure the genetic differences between races and peoples. These population differences in blood group gene frequencies are believed to be related to differential susceptibility or resistance to a variety of diseases.

In any event, some ten blood group systems are known to anthropologists. Racial and population differences have been discovered in the distribution of phenotypes within each of these ten systems. The two blood group systems which have been most thoroughly investigated by anthropologists and population geneticists are the ABO and Rhesus systems.

In the ABO-system, European Whites have a high frequency of blood type A—in comparison to American Indians and African Negroes, a moderate frequency of blood type B—but markedly lower than that found among East Asian Mongolids, and a moderate frequency of blood type O—but lower than that found among American Indians and Eskimos. The highest frequencies of Rh-negative individuals are found among European White populations. In contrast, the lowest frequencies of Rh-negatives are found among East Asian Mongolids, American Indians, Eskimos, and Australian aborigines.

Population differences also exist in the distribution of the ABO and Rhesus phenotypes within the primary or geographical races of man. In Europe, the highest frequencies of blood type B are found among the Finnish and Slavic peoples of East Europe. High frequencies of blood type A are found among the Germanic peoples of northern and central Europe, as well as in France, Iberia, and mainland Italy. The highest frequencies of blood type O are found among peoples in the westernmost regions of Europe—the Basques, Icelanders, Scots, and Irish. The percentage of Rh-negative individuals is higher than the European average of 16 to 18 per cent among the Basques and lower than average among the Lapps and Sardinians.

In recent years detailed studies have been conducted on the ABO and Rhesus blood group distributions within the British Isles. Some 1 per cent of the total population of Great Britain and Northern Ireland has been typed for these two blood groups. Regional differences have been found within the British Isles, which separate the "Germanic" English from the "Celtic" Welsh, Scots, and Irish. A higher frequency of blood type A and lower frequencies of blood types O and B are found among the English as compared to the three Celtic peoples.

The detailed blood group data available from Great Britain and Northern Ireland can be employed in comparative studies of the similarities of other Anglo-Saxon populations to parent populations in the British Isles. The early settlers of America were primarily from the British Isles. In 1790 82 per cent of the White population of the newly formed United States of America was estimated to be of English (or Welsh) origin, and 91 per cent of English, Scots, or Irish origin. Subsequent immigration from different areas of Europe has greatly altered the population structure of the country. However, in some areas of the United States—particularly the southern states—the White population has remained descended from the original settlers from the British Isles.

As part of a larger study of the anthropological and psychological structure of an American Anglo-Saxon population, serological data were obtained from students at two academies in the southern Mississippi area—Sanford Academy and Columbia Academy. Virtually all of the students are of English, Scots, and Scotch-Irish origin. Almost all are Protestant in religious background, with the majority of the Baptist denomination.

The combined distribution of the ABO phenotypes among the 452 subjects blood typed at the two academies was: O = 46.0%, A = 42.5%, B = 7.3%, and AB = 4.2%. This distribution is virtually identical with the ABO distributions found in central, eastern and southern England. 17.5 per cent of the 451 subjects blood typed for the Rhesus system were Rh-negative. This is also within the 16 to 18 per cent range of Rh-negative individuals found in the British Isles. On the basis of these comparative serological data, the students at Sanford and Columbia Academies appear to be predominantly of English origin.

APPENDIX (Walter, 1962)

Distribution of the ABO phenotypes and gene frequencies in the races and peoples of the world

<i>National group</i>	<i>Author</i>	<i>Number of subjects</i>	<i>Per cent of blood type O</i>	<i>Per cent of blood type A</i>	<i>Per cent of blood type B</i>	<i>Per cent of blood type AB</i>	<i>p-gene frequency (for blood type A)</i>	<i>q-gene frequency (for blood type B)</i>	<i>r-gene frequency (for blood type O)</i>
A. EUROPEAN WHITES									
Albanians	Simonovic 1953	500	37.8%	43.0%	13.2%	6.0%	0.284	0.093	0.614
Basques	Irizar 1937	138	56.5%	38.4%	1.5%	3.6%	0.222	0.010	0.753
Belgians	Moureau 1937	3,500	46.7%	41.9%	8.3%	3.1%	0.257	0.058	0.685
Bulgarians	Ganev 1934	6,000	32.1%	44.4%	15.4%	8.1%	0.308	0.123	0.567
Danes	In Martin-Saller 1960	7,488	43.0%	43.0%	10.5%	3.5%	0.285	0.110	0.604
 Germans—									
Berlin	In Martin-Saller 1960	39,174	36.5%	42.5%	14.5%	6.5%	0.285	0.110	0.604
Danzig	In Martin-Saller 1960	1,888	33.1%	41.6%	18.0%	7.3%	0.288	0.139	0.575
Hamburg	Haselhorst 1930	8,680	39.2%	43.4%	13.0%	4.4%	0.283	0.098	0.626
Stuttgart	Mayser 1932	1,300	43.0%	42.4%	9.9%	4.7%	0.268	0.072	0.657
Westfalia	Walter 1975	9,310	42.1%	44.6%	9.7%	3.6%	0.262	0.071	0.647
Rheinland-Pfalz	Walter 1975	4,433	39.2%	48.5%	8.9%	3.4%	0.307	0.057	0.626
English	Dobson-Ikin 1946	190,177	46.7%	41.7%	8.6%	3.0%	0.277	0.061	0.660
Estonians	Rooks 1934	1,844	32.3%	36.6%	22.4%	8.7%	0.261	0.170	0.589
Finnns	In Martin-Saller 1960	3,361	37.5%	39.2%	17.0%	6.3%	0.263	0.126	0.612
French	In Martin-Saller 1960	1,265	39.8%	42.3%	11.8%	6.1%	0.276	0.088	0.632
Greeks	Diamantopoulos 1928	1,200	42.0%	39.6%	14.2%	3.7%	0.254	0.102	0.648
Dutch	Nijenhuis 1957	3,085	45.7%	41.2%	9.6%	3.5%	0.256	0.068	0.677
Irish	Boyd 1937	399	55.2%	31.1%	12.0%	1.7%	0.186	0.076	0.744
Icelanders	Jonsson 1923	800	55.7%	32.1%	9.6%	2.6%	0.190	0.062	0.747

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

[illegible]

Region	Year	484	41.1%	53.8%	3.5%	1.4%	0.333	0.027	0.642
Greenland	Bay-Smith 1930	484	41.1%	53.8%	3.5%	1.4%	0.333	0.027	0.642
Labrador	Sevall 1939	143	55.6%	44.4%	0.0%	0.0%	0.253	0.000	0.753
Alaska	Pauls <i>et al.</i> 1953	2,954	38.1%	44.1%	13.1%	4.7%	0.268	0.032	0.700
Alleutian	Laughlin 1948	144	49.3%	44.4%	4.2%	2.1%	0.268	0.032	0.700

<i>National group</i>	<i>Author</i>	<i>Number of subjects</i>	<i>Per cent of blood type O</i>	<i>Per cent of blood type A</i>	<i>Per cent of blood type B</i>	<i>Per cent of blood type AB</i>	<i>p-gene frequency (for blood type A)</i>	<i>q-gene frequency (for blood type B)</i>	<i>r-gene frequency (for blood type O)</i>
B. NON-EUROPEAN WHITES									
Ainu	Furuhashi 1933	1,198	25.7%	28.1%	34.4%	11.8%	0.225	0.266	0.509
Arabs—									
Algeria	Hirschfeld 1919	300	39.0%	37.6%	18.6%	4.6%	0.251	0.134	0.625
Aleppo	Altounyan 1928	933	35.7%	27.0%	20.8%	6.5%	0.255	0.157	0.598
Baghdad	Kennedy-Macfarlane 1936	493	35.3%	30.4%	27.0%	7.3%	0.216	0.195	0.595
Yemen	Moshkowsky 1931	158	55.7%	32.3%	10.7%	1.3%	0.192	0.068	0.746
Berbers	Horrenberger 1933	206	52.9%	33.5%	10.2%	3.4%	0.203	0.064	0.727
Armenians—									
Beirut	In Martin-Saller 1960	2,637	28.5%	46.0%	12.4%	13.0%	0.329	0.108	0.534
Tiflis	In Martin-Saller 1960	3,816	31.2%	48.5%	13.8%	6.5%	0.334	0.112	0.553
Turks—									
Istanbul	Babacan 1937	500	33.8%	42.6%	14.8%	8.8%	0.293	0.116	0.581
Ankara	Babacan 1937	100	27.0%	58.0%	9.3%	3.8%	0.402	0.083	0.520
Indians—									
Madras	In Martin-Saller 1960	1,740	43.1%	24.0%	29.4%	3.5%	0.163	0.195	0.657
Tobas	Pandit 1934	200	29.5%	19.5%	38.0%	13.0%	0.157	0.278	0.565
Sikhs	House-Mahanobis 1945	2,278	35.3%	25.2%	30.6%	8.8%	0.188	0.221	0.591
Polynesians—									
Palau	Takasaka 1939	545	58.9%	26.4%	12.3%	2.4%	0.157	0.077	0.768
Hawaii	Nigg 1930	413	36.5%	60.8%	2.2%	0.5%	0.382	0.018	0.604
Marshall Is.	In Martin-Saller 1960	343	52.2%	28.0%	16.9%	2.9%	0.173	0.108	0.723
Samoa	Fulton 1931	500	58.6%	17.0%	19.4%	5.0%	0.103	0.118	0.766

F. AFRICAN NEGRIDS AND CAPOIDS

Alur	Gusinde 1936	512	40.6%	38.5%	17.0%	3.9%	0.252	0.122	0.638
Bailundo	Sarmiento 1953	108	50.0%	27.8%	17.6%	4.6%	0.178	0.118	0.704
Balese	In Martin-Saller 1960	507	48.5%	30.8%	16.4%	4.3%	0.194	0.109	0.697
Bantu	Shapiro 1951	500	63.2%	16.4%	17.4%	3.0%	0.097	0.103	0.796
Dinka	Corkill 1949	56	48.2%	28.6%	14.3%	8.9%	0.209	0.124	0.694
Hausa	Kossovitch 1934	98	35.7%	21.6%	26.5%	4.2%	0.222	0.204	0.598
Kru	Julien 1937	130	56.9%	26.2%	12.3%	4.6%	0.152	0.078	0.754
Madagassese	Hirschfeld 1919	266	45.5%	27.5%	22.5%	4.5%	0.180	0.151	0.674
Senegalese	In Martin-Saller 1960	635	47.4%	25.0%	24.1%	3.5%	0.163	0.157	0.689
Yoruba	Muller 1927	325	52.3%	21.5%	23.0%	3.2%	0.136	0.145	0.724
Zulu	Elsdon-Dew 1936	500	51.8%	24.6%	21.6%	2.0%	0.144	0.127	0.729
Pygmies—									
Bambuti	Gusinde 1936	100	27.0%	41.0%	25.0%	7.0%	0.305	0.200	0.520
Ituri	Jadin 1935	143	38.5%	43.3%	16.2%	4.8%	0.284	0.119	0.622
Bushman	Pijper 1935	268	60.4%	28.0%	7.8%	3.8%	0.163	0.049	0.777
Hottentots	Pijper 1935	506	34.8%	30.6%	29.2%	5.3%	0.220	0.210	0.590

G. AUSTRALIAN ABORIGINES AND MELANESIANS

Australians—									
Walpiri	In Martin-Saller 1960	84	38.1%	61.9%	0.0%	0.0%	0.382	0.000	0.618
Queensland	In Martin-Saller 1960	277	50.3%	31.7%	6.4%	1.6%	0.812	0.040	0.778
South Australia	In Martin-Saller 1960	149	32.2%	67.7%	0.0%	0.0%	0.453	0.000	0.507
Melanesians—									
Ambon	In Martin-Saller 1960	1,471	55.9%	20.9%	20.0%	2.3%	0.129	0.128	0.747
New Guinea	In Martin-Saller 1960	753	53.7%	26.8%	16.3%	3.2%	0.164	0.104	0.733
Papua	Bos 1932	748	62.7%	18.5%	16.7%	2.1%	0.109	0.099	0.792
Negritos—									
Philippines	Grove 1926	501	25.7%	18.2%	44.9%	11.2%	0.156	0.333	0.507

<i>National group</i>	<i>Author</i>	<i>Number of subjects</i>	<i>Per cent of blood type O</i>	<i>Per cent of blood type A</i>	<i>Per cent of blood type B</i>	<i>Per cent of blood type AB</i>	<i>p-gene frequency (for blood type A)</i>	<i>q-gene frequency (for blood type B)</i>	<i>r-gene frequency (for blood type O)</i>
E. AMERICAN INDIANS									
Flatheads	Matson-Schrader 1933	258	51.5%	42.2%	4.7%	1.6%	0.250	0.032	0.708
Navaho	Allen-Korber 1939	622	69.1%	30.6%	0.2%	0.0%	0.166	0.091	0.833
Pueblo	Allen-Schaeffer 1935	353	88.0%	11.7%	0.0%	0.0%	0.061	0.000	0.939
Blackfoot	Matson-Schrader 1933	235	45.5%	50.6%	2.1%	1.8%	0.306	0.016	0.675
Sioux	In Martin-Saller 1960	100	91.0%	7.0%	2.0%	0.0%	0.035	0.010	0.955
Kwakiutl	In Martin-Saller 1960	862	77.2%	20.2%	2.1%	0.0%	0.107	0.012	0.882
Maya	Goodner 1930	223	97.7%	1.3%	0.5%	0.5%	0.006	0.001	0.993
Otomi	Salazar-Artega 1951	81	93.8%	6.2%	0.0%	0.0%	0.032	0.000	0.968
Tarahumara	Echeverria 1956	111	92.9%	4.4%	2.7%	0.0%	0.022	0.014	0.964
Zapoteks	Genna 1953	201	89.1%	10.9%	0.0%	0.0%	0.056	0.000	0.946
Chorots	Mazza <i>et al.</i> 1933	147	89.1%	10.9%	0.0%	0.0%	0.056	0.000	0.946
Guarani	Ribeiro <i>et al.</i> 1935	107	100.0%	0.0%	0.0%	0.0%	0.000	0.000	1.000
Mapuche	Sandoval-Henckel 1954	258	79.5%	13.6%	6.9%	0.0%	0.070	0.035	0.894
Mataco	Mazza <i>et al.</i> 1933	135	96.3%	3.7%	0.0%	0.0%	0.018	0.000	0.982
Toba	Mazza <i>et al.</i> 1933	194	98.5%	1.5%	0.0%	0.0%	0.007	0.000	0.993
Cayapa	Santiana 1953	62	100.0%	0.0%	0.0%	0.0%	0.000	0.000	1.000
Colorado	Santiana 1953	97	100.0%	0.0%	0.0%	0.0%	0.000	0.000	1.000
Jibaro	Santiana 1947	111	100.0%	0.0%	0.0%	0.0%	0.000	0.000	1.000
Colla	Mazza <i>et al.</i> 1933	115	63.5%	36.5%	0.0%	0.0%	1.203	0.000	0.797

TABLE 1
(Boyd, 1952)

*The relation between genotypes and phenotypes
in the ABO system*

<i>System I:</i>	<i>Genotype</i>	<i>Phenotype</i>
	OO	O
	AA } AO }	A
	BB } BO }	B
	AB	AB
<i>System II:</i>	<i>Genotype</i>	<i>Phenotype</i>
	OO	O
	A ₁ A ₁ } A ₁ A ₂ } A ₁ O }	A ₁
	A ₂ A ₂ } A ₂ O }	A ₂
	BB } BO }	B
	A ₁ B	A ₁ B
	A ₂ B	A ₂ B

TABLE 2
(Walter, 1962)

The statistical relation between ABO blood type and disease

<i>Disease</i>	<i>Number of Subjects</i>	<i>Number of Studies</i>	<i>Relative frequency of blood type</i>	<i>In comparison to blood type</i>
1. Duodenal ulcers	8,416	9	O 1.36	A
		9	O 1.41	B
		7	O 1.35	AB
		10	O 1.38	A + B + AB
2. Stomach ulcers	3,999	9	O 1.16	A
		9	O 1.19	A + B + AB
3. Stomach cancer	6,795	13	A 1.19	O
		10	A 1.19	B
4. Female genital cancer	7,705	10	A 1.15	O
		10	B 1.04	O
5. Pernicious anemia	1,498	12	A 1.26	O
6. Diabetes mellitus	2,150	4	A 1.16	O
7. Colon and rectal cancer	3,040	6	A 1.06	O
8. Lung cancer	2,516	6	A 0.96	O
9. Breast cancer	2,020	6	A 1.07	O

TABLE 3 (Walter, 1962)			
Relative frequency of the ABO blood type genes among the primary races of man			
Racial group	Relative frequency of p gene for blood type A	Relative frequency of q-gene for blood type B	Relative frequency of r-gene for blood type O
European Whites	High	Moderate	Moderate
Non-European Whites	High	High	Low
East Asian Mongoloids	Moderate	High	Low
American Indians	Low	Low	High
Eskimos	High	Low	High
African Negroes	Low	Moderate	High
Australians and Melanesians	High	Low	High

TABLE 4 (Walter, 1962)					
Comparative distribution of the ABO gene frequencies among the primary races of man					
ABO blood type gene	European Whites	Non-European Whites	East Asian Mongoloids	American Indians	Eskimos
p-gene (A)	26	28	22	15	29
q-gene (B)	12	20	25	2	2
r-gene (O)	62	52	53	83	69
Total	100	100	100	100	100
				African Negroes	Australians and Melanesians
				15	27
				14	5
				71	68
				100	100

TABLE 5 (Mourant, 1954)		
Comparative distribution of the ABO gene frequencies in the world and in Great Britain and Northern Ireland		
ABO blood type gene	Total world	Great Britain and Northern Ireland
p-gene (for blood type A)	21.5	26.0
q-gene (for blood type B)	16.2	6.0
r-gene (for blood type O)	62.3	68.0
Total	100.0	100.0

TABLE 6
(Kopec, 1970)

*Distribution of the ABO phenotypes in 19
regions of England, Scotland, and Wales*

<i>Geographical region</i>	<i>Number of subjects</i>	<i>Percent of blood type O</i>	<i>Percent of blood type A</i>	<i>Percent of blood types B + AB</i>
I. Inverness, Scotland	2,785	50.80%	35.97%	13.23%
II. Aberdeen, Scotland	8,811	50.82%	35.33%	13.85%
III. Dundee, Scotland	7,186	50.92%	36.01%	13.07%
IV. Glasgow, Scotland	14,668	52.83%	33.23%	13.94%
V. Edinburgh, Scotland	27,218	50.63%	35.55%	13.81%
VI. Newcastle upon Tyne, England	36,621	48.80%	39.18%	12.02%
VII. Liverpool, England and North Wales	43,158	48.64%	39.71%	11.65%
VIII. Manchester, England	27,728	47.84%	40.95%	11.21%
IX. Leeds, England	45,314	46.38%	41.77%	11.86%
X. Sheffield, England	37,340	45.21%	43.60%	11.19%
XI. Birmingham, England	50,852	45.88%	42.84%	11.28%
XII. Cardiff, Wales	12,826	45.16%	41.35%	13.50%
XIII. Bristol, England	21,169	44.54%	44.24%	11.22%
XIV. Oxford, England	11,662	44.91%	43.73%	11.36%
XV. Cambridge, England	16,817	43.66%	45.79%	10.55%
XVI. Brentwood, England	12,358	44.10%	45.00%	10.90%
XVII. Edgeware, England	19,022	45.12%	43.64%	11.24%
XVIII. Sutton, England	49,245	45.19%	43.36%	11.45%
XIX. London, England	33,026	45.78%	42.20%	12.02%
Total	477,806	46.80%	41.38%	11.82%

Geographical region	Number of subjects	Percentage of blood type O	Percentage of blood type A	Percentage of blood type B	Percentage of blood type AB
1. Northeast Scotland	1,092	49.82%	30.77%	15.38%	4.03%
2. Aberdeen and Lowlands of Scotland	53,675	50.76%	35.56%	10.63%	3.04%
3. Northwest Edinburgh	19,937	49.32%	39.84%	8.00%	8.84%
4. Newcastle upon Tyne	13,815	48.71%	39.51%	8.82%	2.96%
5. Durham	8,225	47.42%	39.10%	9.90%	3.59%
6. North Lancashire	2,587	46.39%	40.74%	9.16%	3.71%
7. North Yorkshire	11,758	46.03%	40.93%	9.31%	3.73%
8. West Yorkshire	41,059	47.49%	40.93%	8.57%	3.02%
9. Lancashire	18,533	48.22%	41.71%	7.43%	2.64%
10. Preston	2,061	45.51%	41.58%	10.09%	2.81%
11. Cheshire	6,987	46.87%	40.52%	9.46%	3.15%
12. East Yorkshire	8,455	46.00%	42.52%	8.35%	3.13%
13. North and Central Wales	7,062	48.57%	37.60%	10.44%	3.40%
14. Central England	60,606	46.21%	42.58%	8.06%	3.15%
15. South Central England	44,094	44.79%	44.05%	8.12%	3.04%
16. Monmouth	5,280	44.05%	43.03%	9.07%	3.84%
17. Lincoln	14,560	43.40%	45.31%	8.28%	3.01%
18. Norfolk	9,353	42.91%	46.68%	7.14%	3.27%
19. Norwich	746	39.95%	45.84%	10.99%	3.22%
20. Suffolk	19,076	44.46%	44.84%	7.61%	3.09%
21. Southeast England	33,975	43.84%	44.79%	8.21%	3.16%
22. Glasgow	9,385	53.98%	31.97%	10.91%	3.14%
23. Shipley	1,436	42.48%	45.61%	9.26%	2.65%
24. Todmorden	219	36.07%	52.97%	6.85%	4.11%
25. Halifax	3,913	44.95%	43.11%	9.02%	2.91%
26. Sheffield	2,515	43.10%	45.61%	7.47%	3.82%
27. West Liverpool	6,643	51.41%	37.69%	8.60%	2.30%
28. East Liverpool	5,434	48.97%	37.93%	9.84%	3.26%
29. Warwick	685	38.39%	51.09%	7.30%	3.21%
30. East London	11,409	47.81%	39.77%	9.26%	3.16%
31. West London	1,051	43.11%	39.13%	13.68%	4.08%
32. Middlesex	23,617	46.29%	41.93%	8.70%	3.08%
33. South England	15,700	46.52%	42.36%	7.95%	3.17%
34. South Dorset	3,259	43.88%	45.26%	8.31%	2.55%
35. Devon	2,370	41.69%	45.91%	9.11%	3.29%
36. Plymouth	1,809	46.38%	41.40%	8.73%	3.48%
37. West Cornwall	1,492	43.56%	45.31%	7.71%	3.42%
38. Carmarthen	2,621	46.81%	40.48%	9.50%	3.21%
39. Pembroke	1,310	38.02%	47.40%	11.22%	3.36%
Total	477,806	46.80%	41.38%	8.73%	3.10%

TABLE 8
(Kopce, 1970)

Distribution of the ABO gene frequencies in 39 areas of England, Scotland, and Wales

<i>Geographical region</i>	<i>Number of subjects</i>	<i>p-gene frequency (for blood type A)</i>	<i>p-gene frequency (for blood type B)</i>	<i>r-gene-frequency (for blood type O)</i>
1. Northeast Scotland	1,092	19.25	10.23	70.52
2. Aberdeen and Lowlands of Scotland	53,675	21.65	7.09	71.26
3. Northwest England	19,937	24.28	5.57	70.15
4. Newcastle-Tyne	13,815	24.15	6.07	69.78
5. Durham	8,225	24.28	6.98	68.74
6. North Lancashire	2,587	25.44	6.65	67.91
7. North Yorkshire	11,758	25.58	6.74	67.68
8. West Yorkshire	41,059	25.13	5.97	68.90
9. Lancashire	18,533	25.40	5.17	69.43
10. Preston	2,061	25.49	6.69	67.82
11. Cheshire	6,987	24.95	6.52	68.53
12. East Yorkshire	8,455	26.28	5.92	67.80
13. North and Central Wales	7,062	23.18	7.17	69.65
14. Central England	60,606	26.32	5.77	67.91
15. South Central England	44,094	27.27	5.75	66.98
16. Monmouth	5,280	27.09	6.68	66.23
17. Lincoln	14,560	28.14	5.82	66.04
18. Norfolk	9,153	29.24	5.35	65.41
19. Norwich	746	28.74	7.41	63.85
20. Suffolk	19,076	27.84	5.50	66.66
21. Southeast England	33,975	27.86	5.86	66.28
22. Glasgow	9,385	19.42	7.29	73.29
23. Shipley	1,436	28.16	6.16	65.68
24. Todmorden	219	34.45	5.63	59.92
25. Halifax	3,913	26.57	6.16	67.27
26. Sheffield	2,515	28.83	5.81	65.36
27. West Liverpool	6,643	22.56	5.61	71.83
28. East Liverpool	5,434	23.30	6.78	69.92
29. Birmingham	685	32.44	5.41	62.15
30. East London	11,409	24.45	6.42	69.13
31. West London	1,053	24.69	9.33	65.98
32. Middlesex	23,617	25.85	6.08	68.07
33. South England	15,700	26.18	5.72	68.10
34. South Dorset	3,259	27.81	5.60	66.59
35. Devon	2,370	28.77	6.42	64.81
36. Plymouth	1,809	25.74	6.30	67.96
37. West Cornwall	1,492	28.38	5.72	65.90
38. Carmarthen	2,621	24.96	6.57	68.47
39. Pembroke	1,310	29.97	7.61	62.42

TABLE 9
(Koepec, 1970)

*Distribution of the ABO phenotypes in nine areas
of Northern Ireland*

<i>Geographical region</i>	<i>Number of subjects</i>	<i>Percentage of blood type O</i>	<i>Percentage of blood type A</i>	<i>Percentage of blood type B</i>	<i>Percentage of blood type AB</i>
1. Fermanagh (1)	953	52.78%	37.15%	8.18%	1.89%
2. Londonderry (2-8)	8,036	56.06%	30.59%	10.39%	2.96%
3. North Antrim (9-26)	10,660	53.39%	33.62%	10.17%	2.82%
4. South Antrim (27-34)	8,457	56.35%	32.33%	9.14%	2.18%
5. Belfast (35-43)	16,412	54.28%	33.19%	9.81%	2.72%
6. Bangor (44-50)	10,430	54.67%	34.35%	8.78%	2.20%
7. North Down (51-54)	4,209	53.01%	33.43%	9.95%	3.61%
8. South Down (55-57)	3,844	57.26%	29.34%	10.93%	2.47%
9. Armagh (58-60)	3,204	54.06%	35.42%	7.99%	2.53%
Total	66,205	54.74%	32.97%	9.65%	2.64%

TABLE 10
(Koepec, 1970)

*Distribution of the ABO gene frequencies in nine areas
of Northern Ireland*

<i>Geographical region</i>	<i>Number of subjects</i>	<i>p-gene frequency (for blood type A)</i>	<i>q-gene frequency (for blood type B)</i>	<i>r-gene frequency (for blood type O)</i>
1. Fermanagh	953	21.95%	5.18%	72.87%
2. Londonderry	8,036	18.46%	6.90%	74.64%
3. North Antrim	10,660	20.27%	6.72%	73.01%
4. South Antrim	8,457	19.07%	5.83%	75.10%
5. Belfast	16,412	19.94%	6.47%	73.59%
6. Bangor	10,430	20.35%	5.65%	74.00%
7. North Down	4,209	20.60%	7.01%	72.39%
8. South Down	3,844	17.42%	6.94%	75.64%
9. Armagh	3,204	21.21%	5.40%	73.39%
Total	66,205	19.66%	6.34%	73.99%

TABLE 11
(Walter, 1975)

*Distribution of the ABO phenotypes among school children
in six regions of West Germany*

<i>Geographical region</i>	<i>Number of subjects</i>	<i>Percentage of blood type O</i>	<i>Percentage of blood type A</i>	<i>Percentage of blood-type B</i>	<i>Percentage of blood type AB</i>
1. Westerwald	114	41.4%	45.5%	9.6%	3.5%
2. Eifel	185	36.2%	49.8%	9.7%	4.3%
3. Hunsrück	144	34.0%	54.2%	8.3%	3.5%
4. Rheinhessen	153	38.0%	51.6%	6.5%	3.9%
5. Hinterpfalz	136	41.9%	43.4%	12.5%	2.2%
6. Vorderpfalz	159	34.6%	55.3%	6.3%	3.8%
Total	891	37.4%	50.3%	8.8%	3.5%

TABLE 12
(Kopec, 1970)

Distribution of the Rhesus phenotypes in 19 regions of England, Scotland, and Wales

<i>Geographical region</i>	<i>Number of subjects</i>	<i>Number of Rh-negative</i>	<i>% Rh-negative</i>
I. Inverness	2,732	518	18.96%
II. Aberdeen	5,107	986	19.31%
III. Dundee	7,186	1,323	18.41%
IV. Glasgow	14,668	2,561	17.46%
V. Edinburgh	16,213	2,750	16.96%
VI. Newcastle upon Tyne	36,621	6,805	18.58%
VII. Liverpool and North Wales	38,706	7,116	18.38%
VIII. Manchester	27,728	5,158	18.60%
IX. Leeds	45,314	8,295	18.31%
X. Sheffield	37,340	7,071	18.94%
XI. Birmingham	33,061	5,813	17.58%
XII. Cardiff	12,826	2,101	16.38%
XIII. Bristol	21,169	3,909	18.47%
XIV. Oxford	11,662	2,031	17.42%
XV. Cambridge	16,817	3,155	18.76%
XVI. Brentwood	10,993	2,026	18.43%
XVII. Edgware	24,664	4,295	17.42%
XVIII. Sutton	53,804	10,152	18.87%
XIX. London	Not given	Not given	Not given
Total	416,611	76,065	18.26%

TABLE 13
(Kopec, 1970)

Distribution of the Rhesus phenotypes in seven regions of Northern Ireland

<i>Geographical region</i>	<i>Number of subjects</i>	<i>Number of Rh-negative</i>	<i>% Rh-negative</i>
I. Antrim	4,377	698	15.95%
II. Armagh	2,273	362	15.93%
III. Belfast	14,700	2,629	17.88%
IV. Derry	2,772	434	15.66%
V. Down	5,175	839	16.21%
VI. Fermanagh	511	82	16.05%
VII. Tyrone	2,168	376	17.34%
Total	31,976	5,420	16.95%

TABLE 14

*Distribution of the ABO phenotypes among south
Mississippi Anglo-Saxon school children*

<i>Geographical region</i>	<i>Total No. of subjects</i>	<i>Number of type O</i>	<i>% of type O</i>	<i>Number of Type A</i>	<i>% of Type A</i>	<i>Number of Type B</i>	<i>% of Type B</i>	<i>Number of Type AB</i>	<i>% of Type AB</i>
Columbia Academy	386	175	45.3%	163	42.3%	32	8.3%	16	4.1%
Sanford Academy	66	33	50.0%	29	44.0%	1	1.5%	3	4.5%
Total	452	208	46.0%	192	42.5%	33	7.3%	19	4.2%

TABLE 15

*Distribution of the ABO gene frequencies among
South Mississippi Anglo-Saxon school children **

<i>Geographical region</i>	<i>Number of subjects</i>	<i>p-gene frequency</i>	<i>q-gene frequency</i>	<i>r-gene frequency</i>
Columbia Academy	386	26.28	5.90	67.31
Sanford Academy	66	26.24	1.05	70.71
Total	452	26.25	5.19	67.82

$$*p = \sqrt{A + O} - \sqrt{O}$$

$$q = \sqrt{B + O} - \sqrt{O}$$

$$r = \sqrt{O}$$

TABLE 16

*Distribution of the Rhesus blood types among
South Mississippi Anglo-Saxon school children*

<i>Geographical region</i>	<i>Number of subjects</i>	<i>Number of Rh-positive</i>	<i>% of Rh-positive</i>	<i>Number of Rh-negative</i>	<i>% of Rh-negative</i>
Columbia Academy	385	312	81.0%	73	19.0%
Sanford Academy	66	60	90.9%	6	9.1%
Total	451	372	82.5%	79	17.5%

TABLE 17

*Distribution of the Rhesus blood type gene frequencies
among South Mississippi Anglo-Saxon school children **

<i>Geographical region</i>	<i>Number of subjects</i>	<i>D-gene frequency</i>	<i>d-gene frequency</i>
Columbia Academy	385	56.41	43.59
Sanford Academy	66	69.83	30.17
Total	451	58.17	41.83

$$*d = \sqrt{\% \text{ Rh-Negatives}}$$

$$D = 1 - d$$

TABLE 18

*Interrelation of the ABO and Rhesus blood groups
among South Mississippi Anglo-Saxon school children*

COLUMBIA ACADEMY

<i>ABO blood type</i>	<i>Number of subjects</i>	<i>Number of Rh-positive</i>	<i>% of Rh-positive</i>	<i>Number of Rh-negative</i>	<i>% of Rh-negative</i>
O	174	147	84.5%	27	15.5%
A	163	127	78.0%	36	22.0%
B	32	26	81.2%	6	18.8%
AB	16	12	75.0%	4	25.0%
Total	385	312	81.0%	73	19.0%

SANFORD ACADEMY

<i>ABO blood type</i>	<i>Number of subjects</i>	<i>Number of Rh-positive</i>	<i>% of Rh-positive</i>	<i>Number of Rh-negative</i>	<i>% of Rh-negative</i>
O	33	28	85.0%	5	15.0%
A	29	28	96.5%	1	3.5%
B	1	1	100.0%	0	0.0%
AB	3	3	100.0%	0	0.0%
Total	66	60	90.9%	6	9.1%

TOTAL SOUTH MISSISSIPPI

<i>ABO blood type</i>	<i>Number of subjects</i>	<i>Number of Rh-positive</i>	<i>% of Rh-positive</i>	<i>Number of Rh-negative</i>	<i>% of Rh-negative</i>
O	207	175	84.6%	32	15.4%
A	192	155	80.9%	37	19.1%
B	33	27	81.8%	6	18.2%
AB	19	15	79.0%	4	21.0%
Total	451	372	82.5%	79	17.5%

TABLE 19

Comparison of the distribution of ABO phenotypes among South Mississippi Anglo-Saxon school children and selected areas of Great Britain and Ireland

<i>Geographical region</i>	<i>Number of subjects</i>	<i>% of blood type O</i>	<i>% of blood type A</i>	<i>% of blood-type B</i>	<i>% of blood type AB</i>
1. South Mississippi	452	46.0%	42.5%	7.3%	4.2%
2. (Sanford and Columbia Academies)	60,606	46.2%	42.6%	8.1%	3.1%
3. Central England	8,455	46.0%	42.5%	8.4%	3.1%
4. East Yorkshire	23,617	46.3%	41.9%	8.7%	3.1%
5. Middlesex	15,700	46.5%	42.4%	7.9%	3.2%
6. South England	7,062	48.6%	37.6%	10.4%	3.4%
7. North and Central Wales	53,675	50.8%	35.6%	10.6%	3.0%
8. Central and South Scotland	10,660	53.4%	33.6%	10.2%	2.8%
9. North Antrim, N. Ireland	8,036	56.0%	30.6%	10.4%	3.0%
9. Londonderry, N. Ireland					

TABLE 20

*(Hrdlicka, 1925)**Distribution of national groups in the American
population of 1790*

<i>National group</i>	<i>Number</i>	<i>%</i>
English	2,605,699	82.1%
Scots	221,562	7.0%
Irish	61,534	1.9%
German	176,407	5.6%
Dutch	78,959	2.5%
French	17,619	0.6%
All other	10,664	0.3%
Total	3,172,444	100.0%

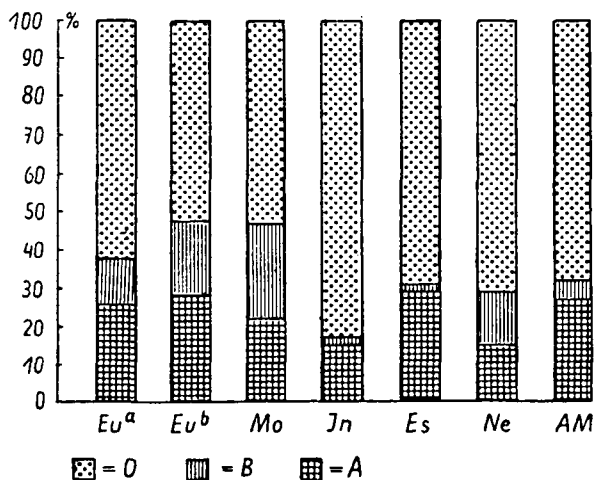


FIGURE 1—Percentage distribution of the ABO blood type genes in the primary races of man (Walter, 1962).

Eu^a = European Whites
 Eu^b = Non-European Whites
 Mo = East Asian Mongolids
 AM = Australian Aborigines and Melanesians

In = American Indians
 Es = Eskimos
 Ne = African Negrids

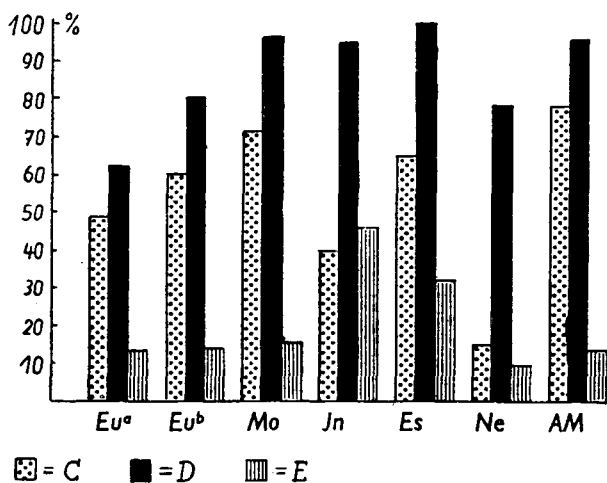
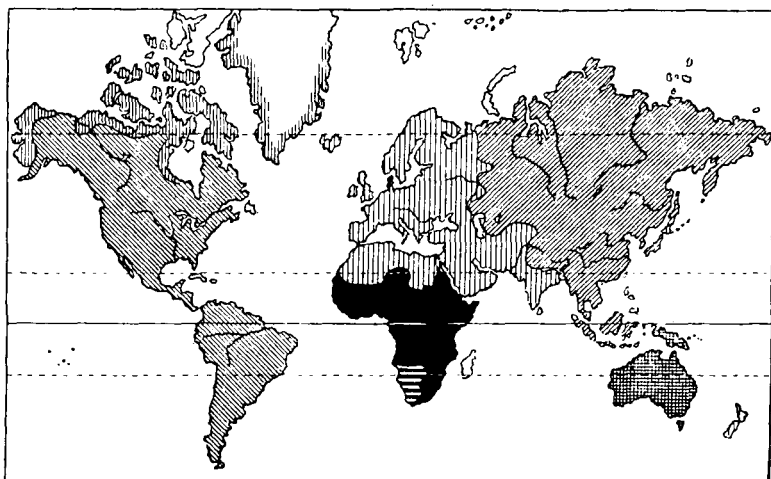


FIGURE 2—Percentage distribution of the CDE blood type genes of the Rhesus system in the primary races of man (Walter, 1962).

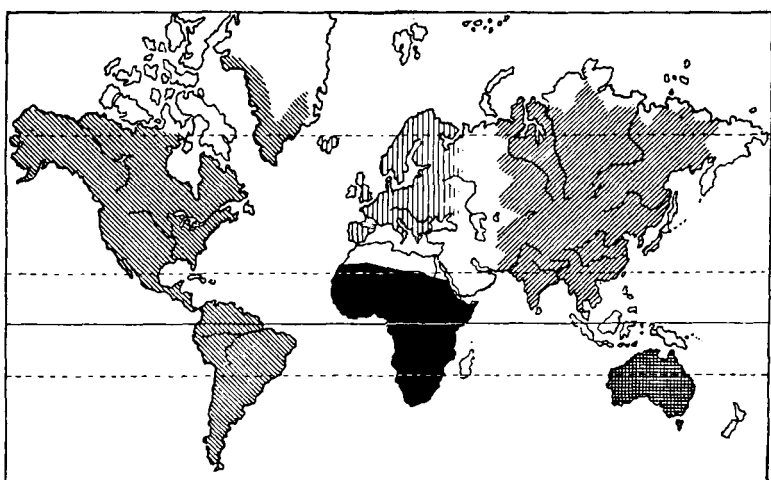
Eu^a = European Whites
 Eu^b = Non-European Whites
 Mo = East Asian Mongolids
 AM = Australian Aborigines and Melanesians

In = American Indians
 Es = Eskimos
 Ne = African Negrids

(a) Professor Egon von Eickstedt's Morphological Classification of the Primary Races of Man—From *Rassenkunde und Rassengeschichte der Menschheit* (1934).



(b) Professor W. C. Boyd's Serological Classification of the Primary Races of Man—From *Genetics and the Races of Man* (1950).



MAP 1—Comparison of Racial Classifications based upon Morphological Traits (a) and Serological Traits (b).

v. EICKSTEDT 1934

Europid:
—
Mongolid:
Indianid:

BOYD 1950

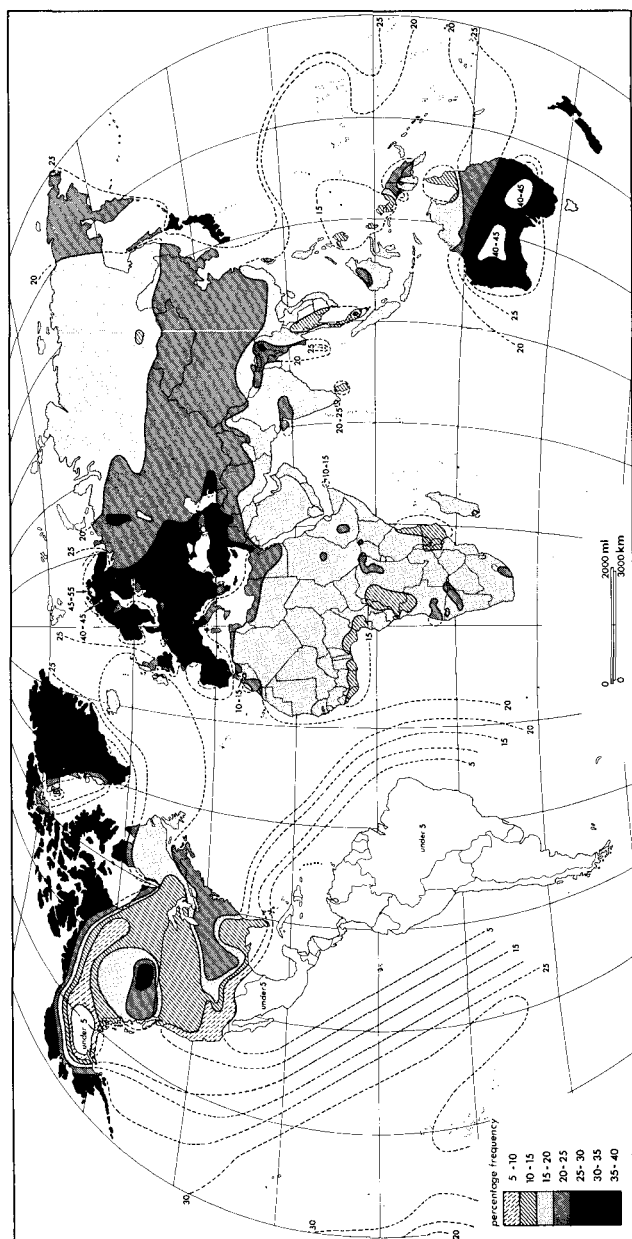
Europäische Gruppe
Alteuropäische Gruppe
Asiatische Gruppe
Amerikanische Gruppe

v. EICKSTEDT 1934

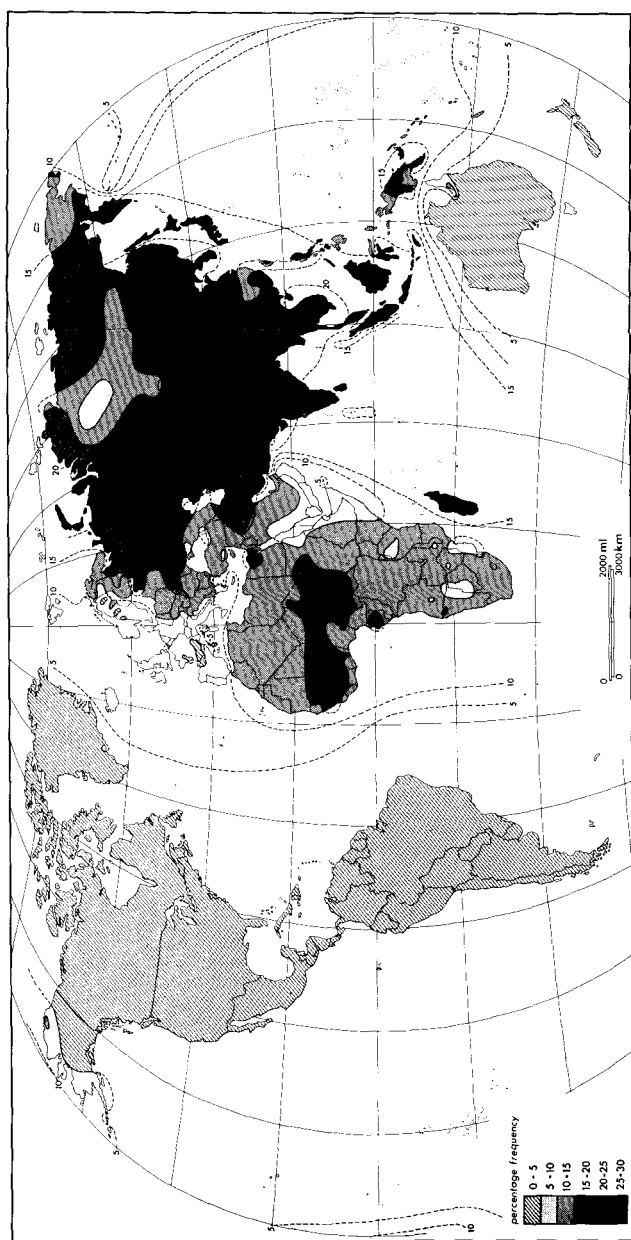
Eskimid:
Negrid
Khoisanid
Australid

BOYD 1950

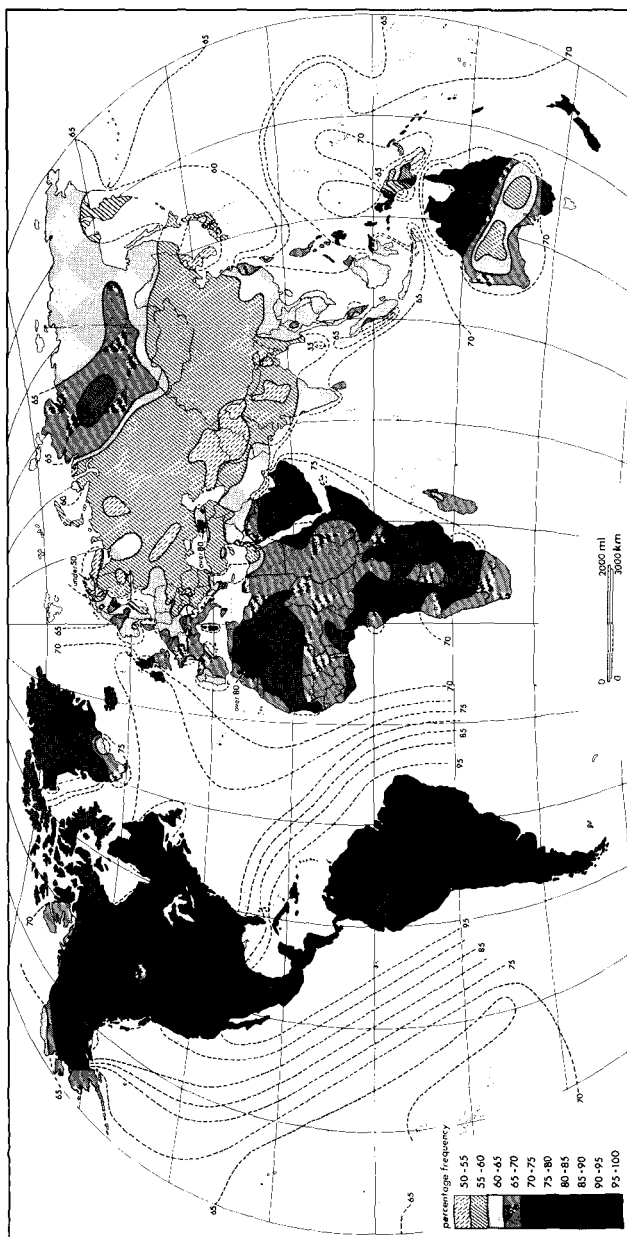
—
Afrikanische Gruppe
—
Australische Gruppe



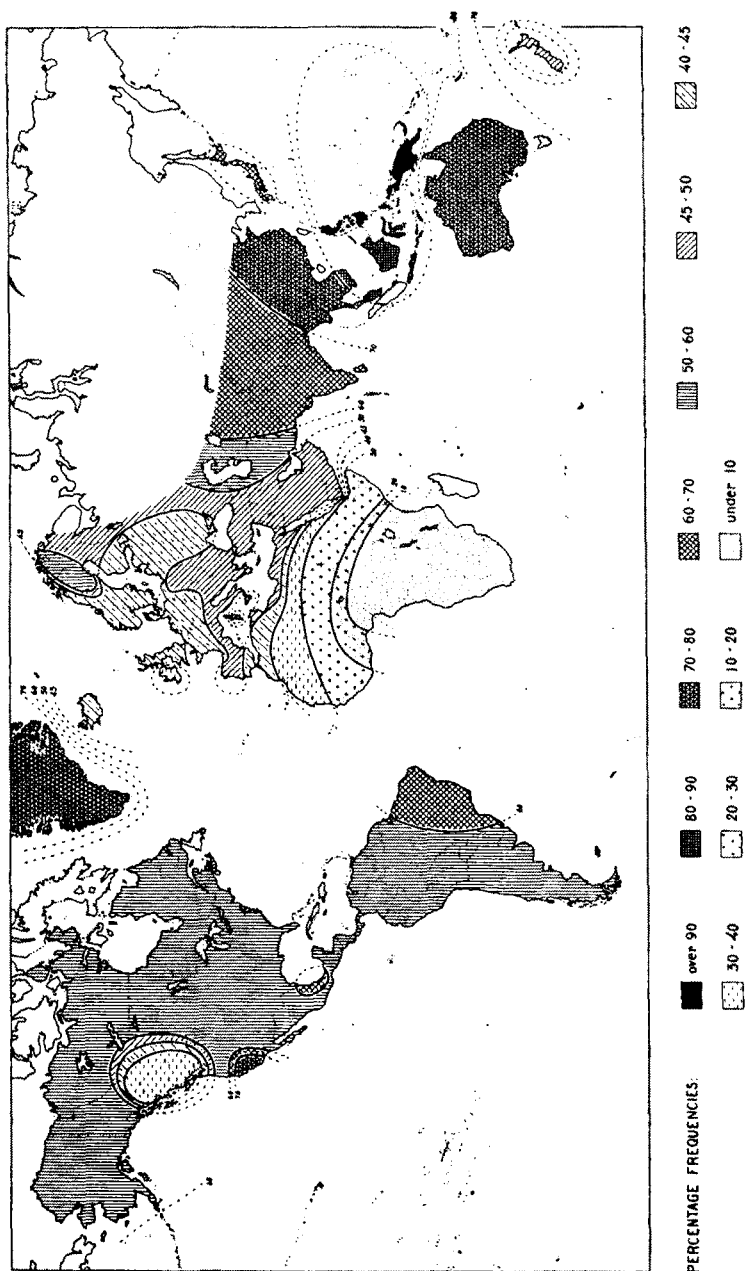
MAP 2—Geographical distribution of the frequency of the p-gene for blood type A (Mourant, 1976).



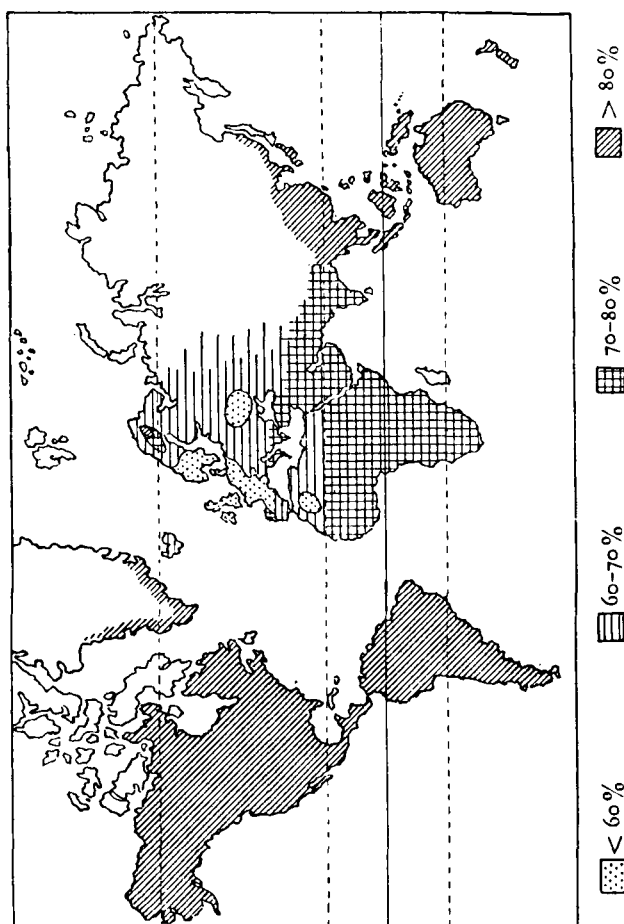
MAP 3—Geographical distribution of the frequency of the q-gene for blood type B (Mourant, 1976).



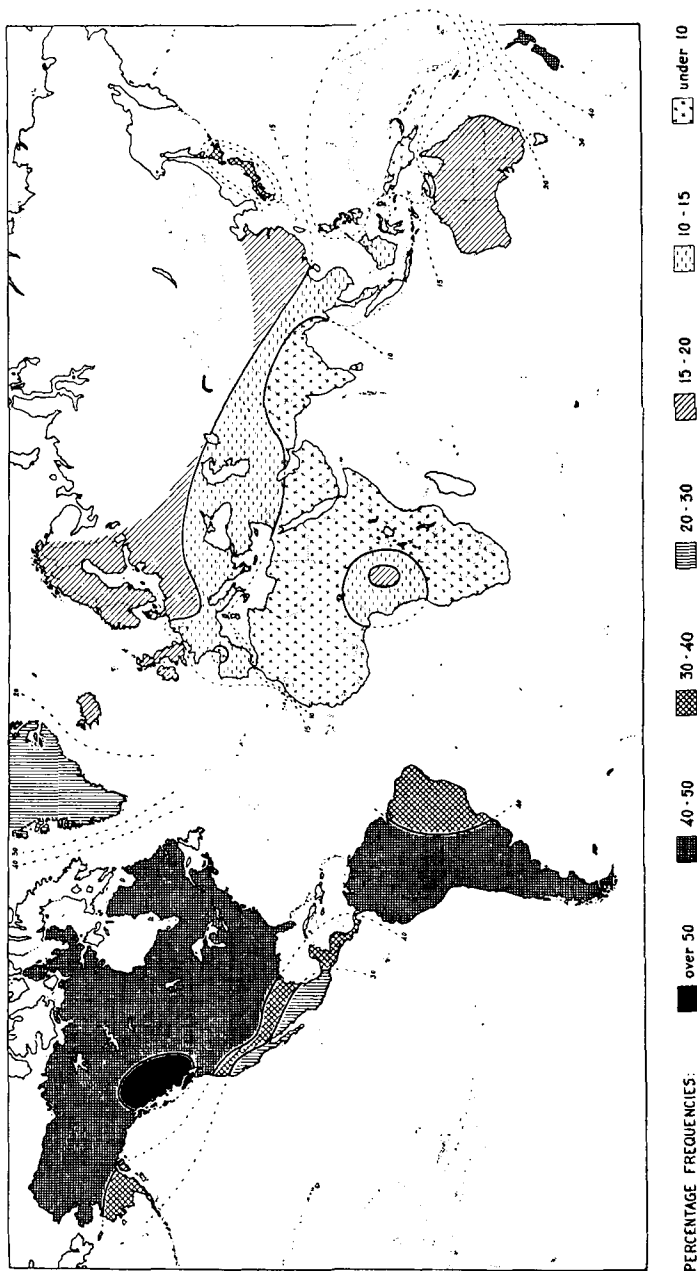
MAP 4—Geographical distribution of the frequency of the r-gene for blood type O (Mourant, 1976).



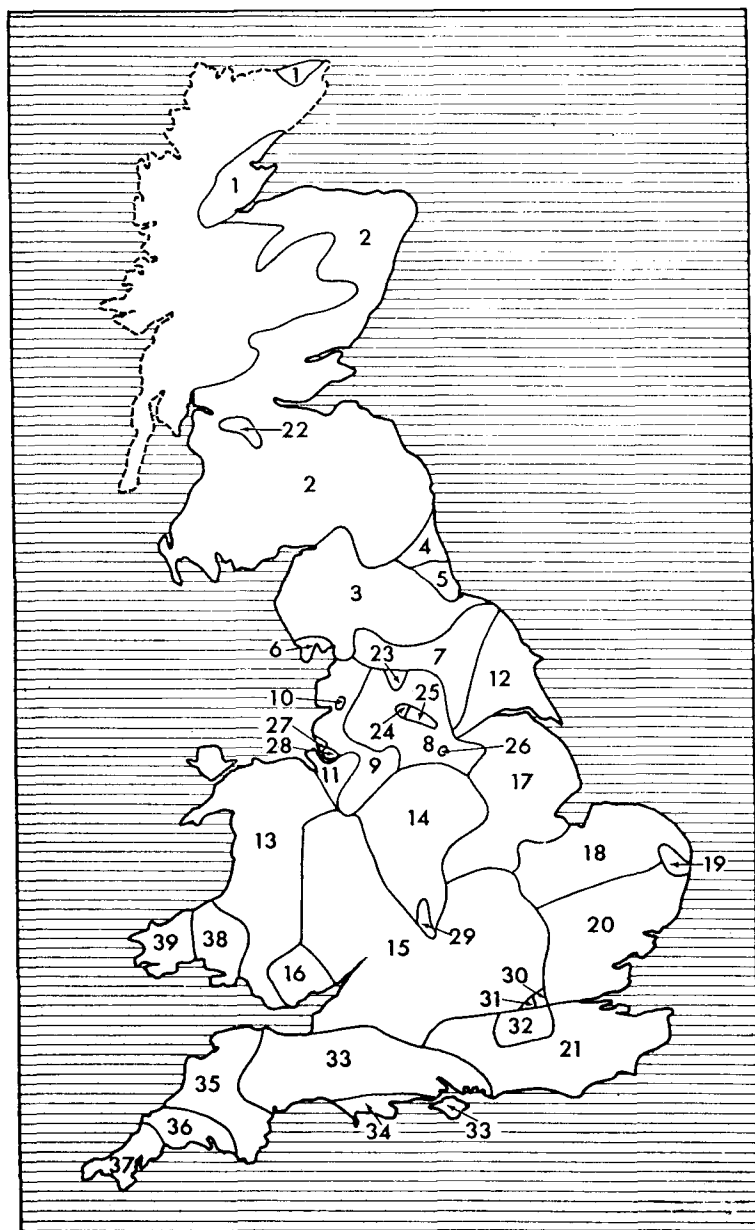
MAP 5—Geographical distribution of the frequency of the C gene in the Rhesus system (Mourant, 1954).



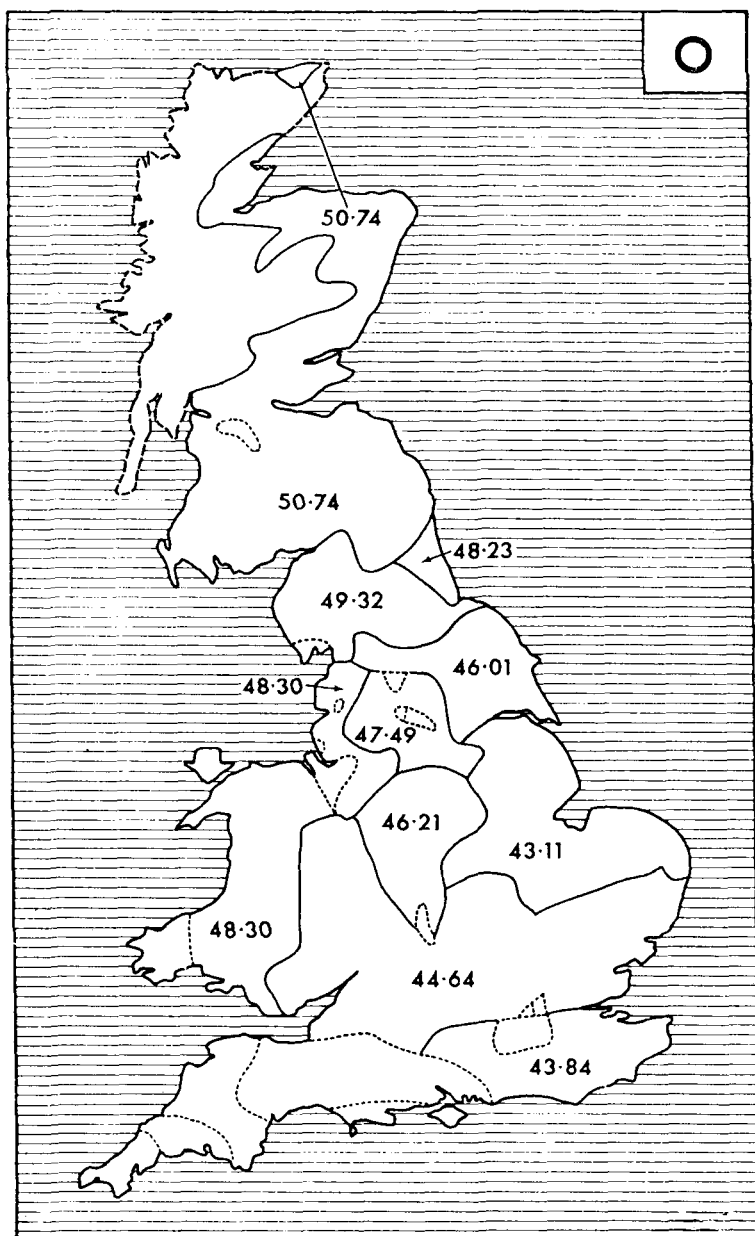
MAP 6—Geographical distribution of the frequency of the D gene in the Rhesus system (Mourant, 1958).



MAP 7.—Geographical distribution of the frequency of the E gene in the Rhesus system (Mourant, 1954).

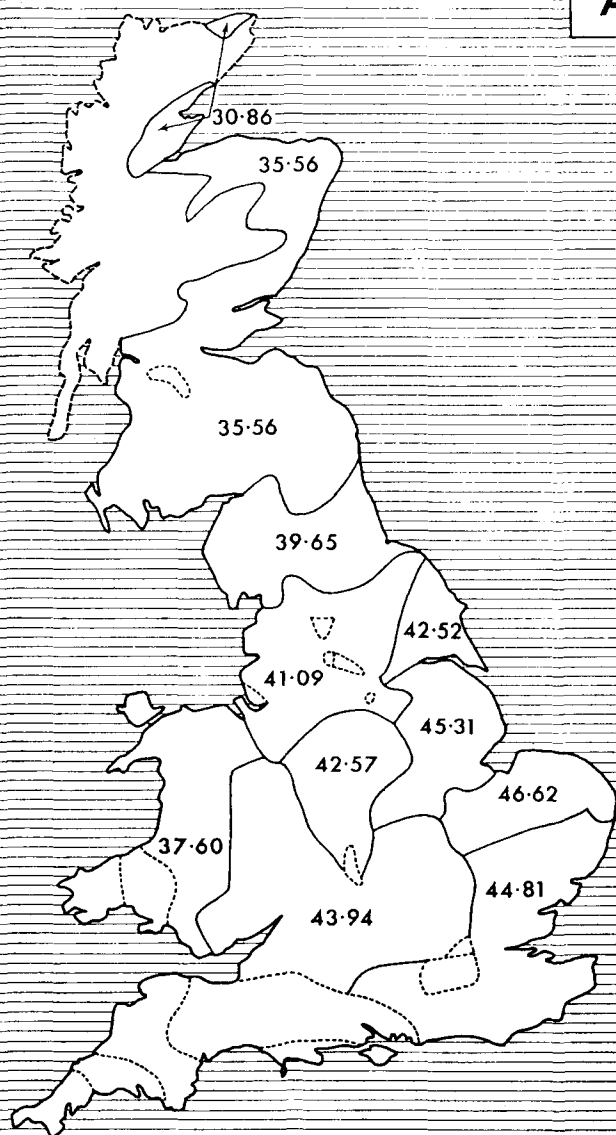


MAP 8—Outline of the 39 areas of Great Britain homogeneous with regard to blood types O, A, and B + AB. Numbers on map refer to geographical areas listed in Tables 7 and 8 (Kopec, 1970).

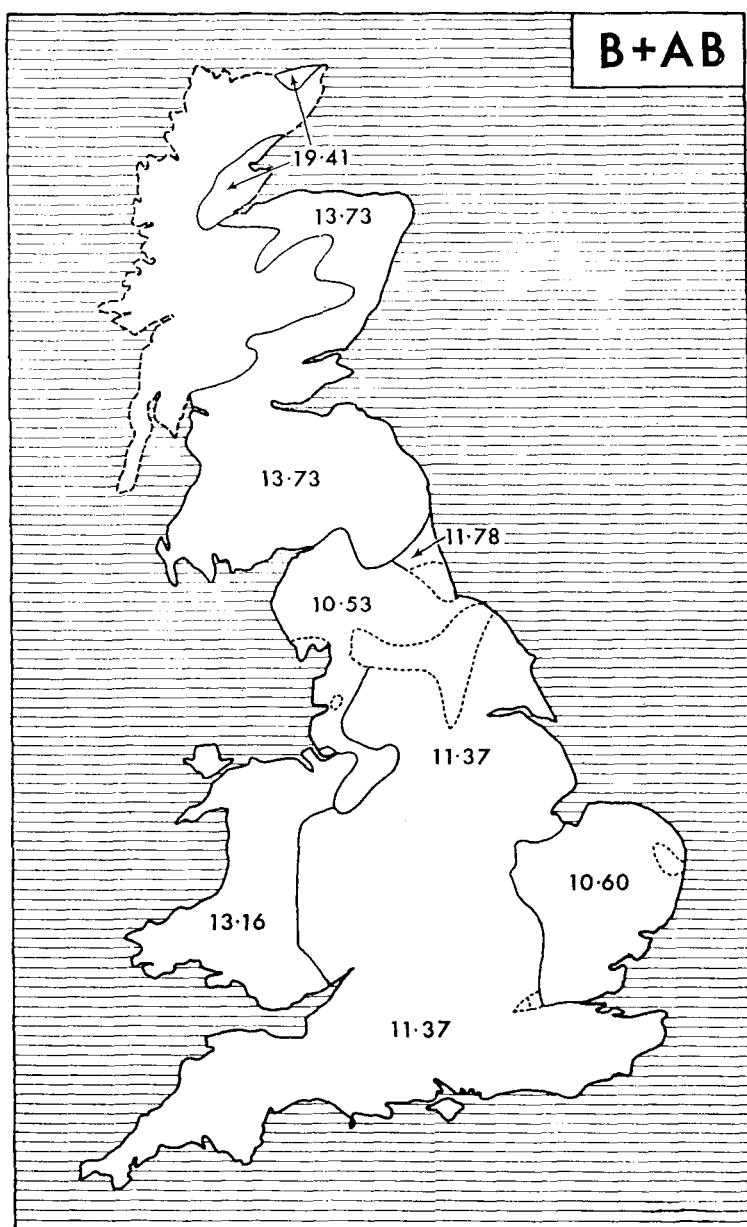


MAP 9—Outline of the 29 areas of Great Britain homogeneous with regard to blood type O. Numbers on map refer to frequency of blood type O in that area (Kopec, 1970).

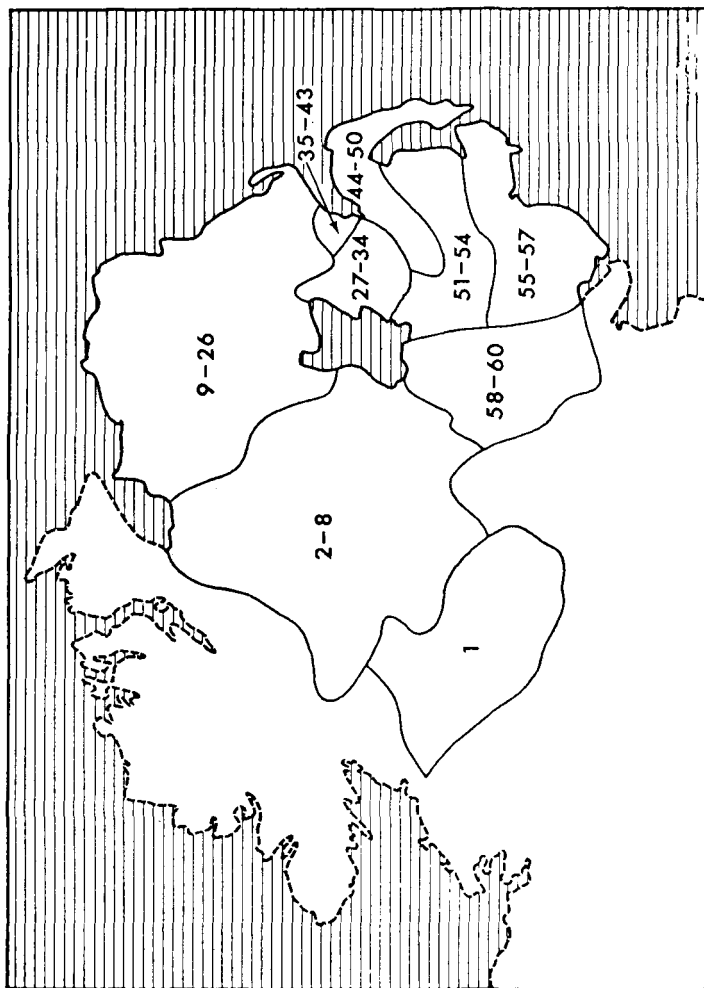
A



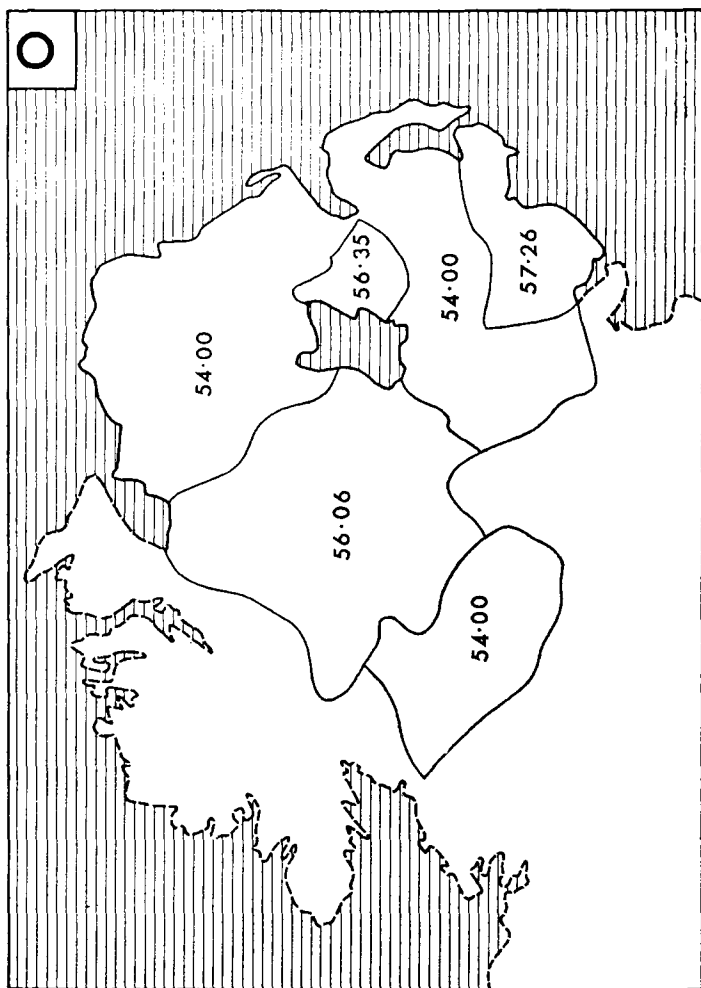
MAP 10—Outline of the 27 areas of Great Britain homogeneous with regard to blood type A. Numbers on map refer to frequency of blood type A in that area (Kopec, 1970).



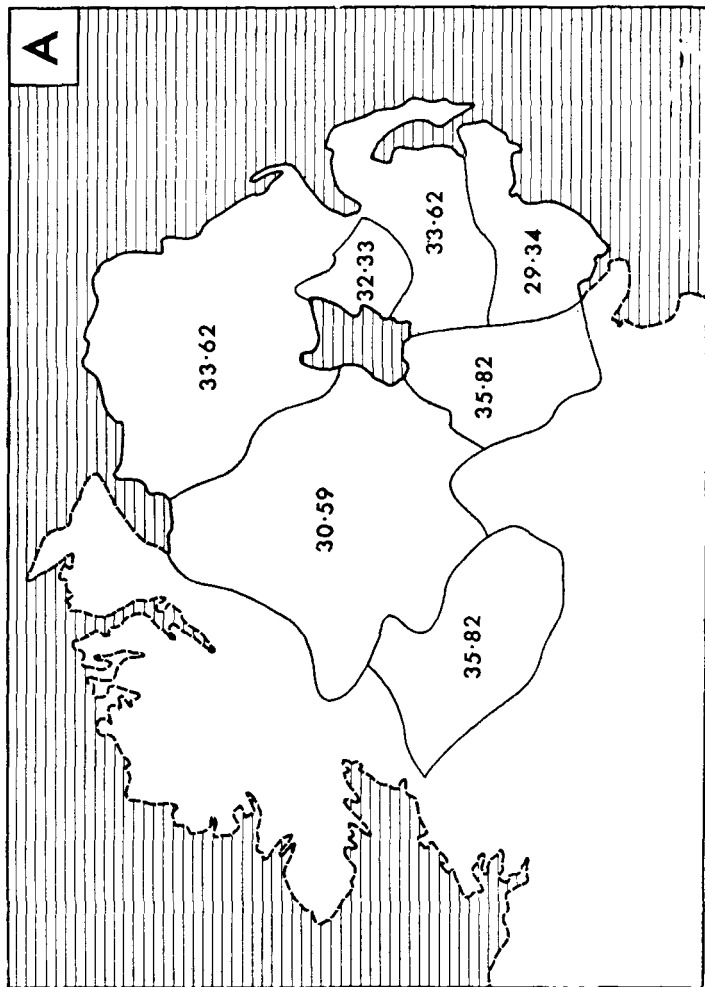
MAP 11—Outline of the 14 areas of Great Britain homogeneous with regard to blood types B + AB. Numbers on map refer to frequency of blood types B + AB in that area (Kopeck, 1970).



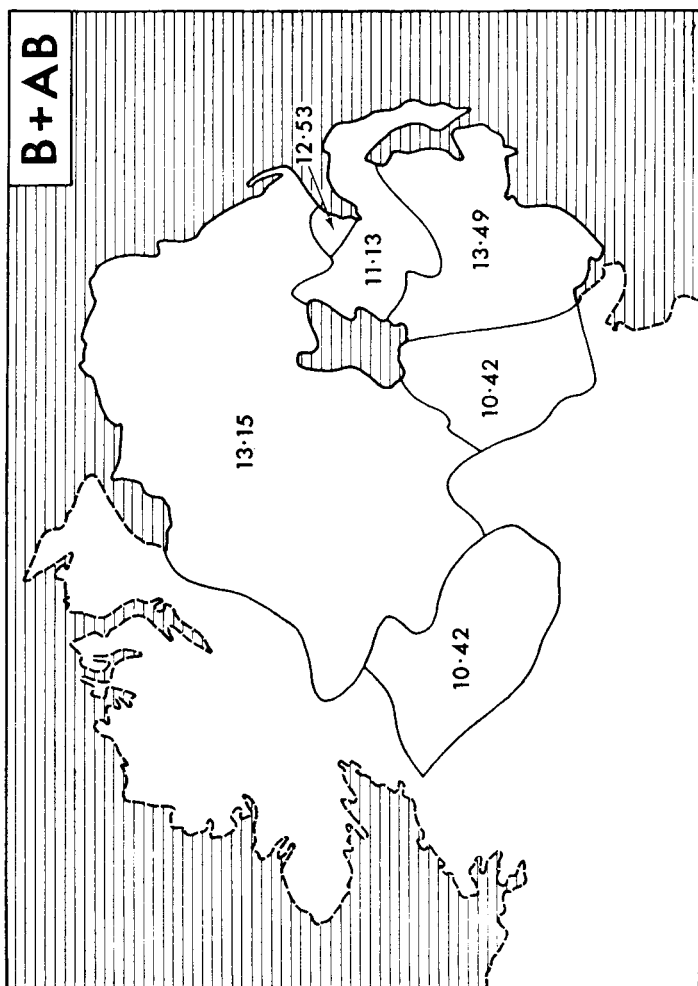
MAP 12—Outline of the nine areas of Northern Ireland homogeneous with regard to blood types O, A, and B + AB. Numbers on the map refer to areas listed in Table 9 (Koepec, 1970).



MAP 13—Outline of the six areas of Northern Ireland homogeneous with regard to blood type O. Numbers on the map refer to frequency of blood type O in that area (Kopec, 1970).



MAP 14—Outline of the seven areas of Northern Ireland homogeneous with regard to blood type A. Numbers on map refer to frequency of blood type A in that area (Kopec, 1970).



MAP 15—Outline of the six areas of Northern Ireland homogeneous with regard to blood types B + AB. Numbers on the map refer to frequency of blood types B + AB in that area (Koepec, 1970).

Notes on Karl Marx's Racial Philosophy of Politics and History

By NATHANIEL WEYL

Since the end of the Second World War, a good deal has been published concerning the racial or racist views of Karl Marx and Friedrich Engels. Most of this literature has been devoted to showing that Marx, though of unalloyed rabbinical descent on both sides of his family, was a fanatical anti-Semite. Some attention has also been devoted to the fact that Marx's and Engels's private correspondence is filled with contemptuous references to Negroes.¹

What is less well known and considerably more significant is that Marx and Engels privately developed an entire racial hierarchy and racial view of history by the 1860s—that is to say, when they were about forty and in full command of their intellectual powers. By the middle of the decade, Marx was actively searching for some scientific or pseudo-scientific justification for his racial value judgments and prejudices. His ambivalent attitude

¹ A pioneer treatment is Leopold Schwartzschild, *Karl Marx, the Red Prussian*, Universal Library, New York, 1947. A sound but polemical overview is found in Bertram D. Wolfe, *Marxism: One Hundred Years in the Life of a Doctrine*, Dial Press, New York, 1965. For Marx's anti-Semitism, see *inter alia*, W. H. Chaloner and W. O. Henderson, "Marx/Engels and Racism," *Encounter*, July 1975, pp. 18-23, and Camillo Berneri, *Le Juif anti-Sémite*, Paris, 1935. The literature on this topic is much more extensive than these examples would indicate.

² According to Sir Isaiah Berlin, Marx "had a greater intellectual admiration" for Charles Darwin "than for any other of his contemporaries, regarding him as having, by his theory of evolution and natural selection, done for the morphology of the natural sciences, what he himself was striving to do for human history." Isaiah Berlin, *Karl Marx: His Life and Environment*, Oxford University Press, New York, 1959, p. 232.

This is the mythical version of the relationship which Engels helped create after Marx's death to give the latter prestige in intellectual circles. "Just as Darwin discovered the law of evolution in organic nature," he said over his friend's grave, "so Marx discovered the law of evolution in human history."

Engels was enormously impressed by *The Origin of Species* and recommended it to Marx in the year of its appearance as a "really splendid" work, revealing "the presence of historical development in nature."

It was not until a year later that Marx tackled Darwin's great work. On 19th December 1860, he wrote Engels that "although developed in the coarse English manner, this is the book which contains the basis in natural history for our work." Two years later, he revised his opinion and wrote Engels that Darwin had applied the "Malthusian 'struggle for existence' among animals and plants" and that evolution was simply "Hobbes' *bellum omnium contra omnes*. . . ." The inescapable conclusion is that Marx skimmed Darwin's work, but did not take the trouble to read or understand it. For further light on the Marx-Darwin relationship, Shlomo Avineri, "From Hoax to Dogma," *Encounter*, March 1967, pp. 30-32.

toward Darwinism derived in part from the fact that the theorist of evolution provided no support for his racist *Weltanschauung*.² Marx's search for scientific validation of his views in the area of race and nationality will be found less in his published work, which had to reflect the internationalist pretensions of the working-class movement he had founded, than in his private correspondence with Engels and others.

The view that Marx and Engels were racists will seem unacceptable to those readers who have taken the internationalist and anti-racist nature of Marxist socialism and communism for granted. The slogan, "workers of the world unite," seems the very antithesis of a race theory.

In recent decades, Marxism has been politically more successful as a revolutionary ideology of have-not races and nations than of have-not classes. This has been a concomitant of the rise of modern nationalism and of the modern nation-state. These have moved to reduce class differences in wealth, income and status within the nation, but have done little to bridge comparable gaps between nations. Consequently, revolutionary socialism and communism have found it expedient and necessary to preach racial equality and take up the cudgels for putatively oppressed races and peoples.

There is little reason to believe that either Marx or Engels foresaw this direction of development. Rather they agreed with Adam Smith and David Ricardo in envisaging an internationalist capitalist order which would promote trends towards equalization of income internationally for members of the same economic class through the freer flow of labor and capital across frontiers in accordance with the laws of comparative national advantage.

One of the more interesting aspects of the Marx-Engels correspondence concerning the racial inequality of peoples, with which I shall deal presently, is that there is no discussion of its possible inconsistency with the philosophy of dialectical materialism. The philosophy of history which Marx had adumbrated 20 years earlier had sought to explain the backwardness of certain peoples and races in terms of the slowness with which they had been drawn into the vortex of world historic processes and the consequent rudimentary development of their social relations of production.

Nevertheless, in one of their earliest and most important, but unpublished, works, *The German Ideology* (1846), Marx and Engels suggested that historic materialism might be superimposed on certain more fundamental conditions which shaped man's fate. "The first premise of all human history," they wrote, "is, of course, the existence of living human individuals. The first fact

to be established is therefore the physical organization of these individuals and their consequent relation to the rest of nature. We cannot here, of course, go into either the physical characteristics of men themselves or the natural conditions found by men—the geological, oro-hydrographical, climatic and other conditions. All historic work must start on the bases of these natural conditions and their modification in the course of history through the action of man.”

The belief that different peoples and races may be different in ability and hence in civilization-potential was not necessarily in contradiction to dialectical materialism. A synthesis of the two views would have involved the proposition that there are two types of group inequality: one natural, the other the artificial product of class exploitation. Any such theory would also have presupposed interaction between the two sets of factors. The more capable peoples would be expected to move more swiftly through the dialectically determined phases of the historic process and this would in turn stimulate their civilizational level.

Marx thought of history in terms of a European élite engaged in making capitalism universal and drawing the most backward regions of the earth into the maelstrom. Hence, he paid little attention to non-Western areas, except as bones of contention, and scarcely disguised the low opinion he held of the character and capacity of their inhabitants. There are, for instance, hardly any references to Latin America in Marx's and Engels's writings and those that exist are usually pejorative. To the founder of “scientific socialism,” Simón Bolívar was “that coward . . . that vile and miserable swine.”³ He hailed the American military defeat of Mexico in 1848 as an opportunity for that country to be annexed by the United States and thus roused from its centuries-long stupor and kicked into history.⁴

SEARCHING FOR A RACE PHILOSOPHER

Marx's racial prejudices corresponded closely with the views of the expansionist German aristocracy into whose ranks he had married, whose ethos he privately envied and admired, and whose

³ Karl Marx and Friedrich Engels, *Works* (Russian edition), Vol. XXII, p. 304.

⁴ Marx's views on this matter were shared in essence by the Mexican Liberal Party which begged General Winfield Scott, when he entered Mexico City as a conqueror, to prevail on President Polk to annex the entire country, since the generation of anarchy and plunder after independence had demonstrated to them the incapacity of Mexicans for self-government. Justin H. Smith, *The War With Mexico*, Macmillan, New York, 1919, two volumes. A similar plea was made by the white inhabitants of Yucatán who faced extermination in a race war. They sent Justo Sierra O'Reilly to Washington to plead for American annexation.

power he perhaps hoped to inherit.⁵ To infer from this, as did Marx's polemical enemy, the brilliant theorist of convergent evolution, Karl Vogt, that Marx was a paid agent of Prussia and later of Imperial Germany would be an over-simplification. Marx considered that the German working-class was the élite and vanguard of world labor. An ideology of German conquest and expansion therefore implied the transfer of peoples, power and territory to that country which both Marks and Engels believed would be the first to embrace socialist revolution. It implied leadership of the world socialist society by that working-class which Marx and Engels considered the most civilized and intelligent on the face of the earth.

These views brought's Marx's political judgments into close alignment with those of Bismark. He considered Russians and Slavs in general (the Poles excepted) to be inferior people and slaves by nature who should be subjugated and perhaps exterminated by Germany. Hatred of Russia and agitation for a German or united West European war to drive the Russians back to Asia was not merely the dream of Marx's and Engels's young manhood; it was an obsession that dominated most of their adult lives.

His hatred of the Jewish people was a pathological political anti-Semitism in many ways comparable to the later ragings of Hitler and Streicher. Since this topic has been expatiated upon

⁵ Gustav Techow, the German officer who had surrendered the Berlin arsenal to the 1848 revolutionaries, gave a fascinating account of Marx's revelations to him on 21st August 1850 of his admiration for the German aristocracy and contempt for the proletariat. It is quoted in full in several modern Marx biographies, including those of Robert Payne and David McLellan.

⁶ Marx had married a reigning beauty, heiress and aristocrat from Trier, Jenny von Westphalen. His academic career was blasted; the revolution on which he had counted was put down; he lived in exile in such grinding poverty that his favorite son died, possibly because of malnutrition; his wife wished herself dead and at one time left him. Marx's books had virtually no influence and few readers until their author was on the threshold of old age. The First International which he started was torn apart by factional struggles and base intrigues, for which Marx was primarily responsible. Living on the edge of financial disaster, Marx sponged on both friends and enemies, even dissipating the life's savings of Lenchen, the German servant girl whom he seduced and whose son he neither acknowledged nor supported.

An example of his anti-Semitism is his characterization of the brilliant Jewish lawyer, writer and socialist leader, Ferdinand Lassalle, whose success he envied. Lassalle entertained Marx in Germany, introduced him to influential people, and did everything he could to encourage the sale of Marx's books. In his letters to Engels and in other private communications, Marx called Lassalle "Izzy the bounder . . . the little kike . . . the canaille . . . the greasy Jew from Breslau . . . the Jewish Nigger. . . ." When Lassalle was killed in a duel, Marx wrote Lassalle's friend, Countess von Hatzfeldt: "I loved him personally."

by highly competent scholars in recent publications, I shall not cite chapter and verse. It was of course an expression of Marx's profound self-hatred. This self-hatred was understandable in a man whose whole life seemed to be a ghastly failure and who had exploited or betrayed almost everyone who loved or trusted him.⁶

In 1865, Marx's search for a savant whose writings would provide "scientific support" for his doctrine of Teutonic expansion and for the proposition that Germany's age-old enemy, Russia, must be ruthlessly destroyed led him to a rather obscure Polish ethnologist named François Duchinski. Born in Kiev in 1817, Duchinski settled in France where, between 1858 and 1864, he published a succession of ethnological and historical volumes designed to prove that the Russians were not really Slavs. As Asiatics, they were intruders of European soil, Duchinski urged, who must be driven back militarily to the Asian land-mass.

On 24th June 1865, Marx wrote Engels in great excitement about Duchinski's discovery that the Great Russians, "that is, the inhabitants of the former Grand Duchy of Moscow, are for the most part Mongols and Finns, etc." Consequently, "*Russia* is a name usurped by the Muscovites. They are not Slavs, do not belong at all to the Indo-German race, but are *des intrus*, who must again be hurled back beyond the Dnieper, etc."

For Marx, the touchstone of any theory of the origin and formation of peoples was whether it provided an ideological justification for the destruction of Russia. Marx's anti-Russian phobia was obsessive, violent, continuous and a major motivating force behind his inflammatory journalism. Thus, the program of the *Neue Rheinische Zeitung* which the two revolutionaries had edited in the 1840s had consisted of two points, Engels told Florence Wischnewsky forty years later, an indivisible German republic and war with Russia. In 1848-49, Engels echoed Max in predicting terror and devastation against the Russian peoples comparable to that which Hitler would actually unleash a century later. The coming revolution would "*destroy* all these little, bull-headed nations *so that their very name will vanish*. The coming world war will cause . . . entire reactionary peoples to disappear from the face of the earth. And that too will be progress." Engels added that "hatred of Russia was and still is the first revolutionary passion of the Germans" and that "we and the Poles and the Magyars will only be able to safeguard the revolution through the most determined terror against these Slavic peoples." As late as 1868, Marx wrote Engels that any war among the western European nations would be a kind of civil war, whereas war against Russia would be a struggle against "semi-Oriental despotism."

MARX DISCOVERS PIERRE TREMAUX

Duchinski's supposed discoveries provided an inadequate scientific foundation either for these sanguinary visions or for the larger racial geography of history that underlay them.

Marx searched for a better scientific authority and in 1866 his patience was rewarded. He discovered Pierre Trémaux, an ethnologist who claimed to have unveiled the interrelationship between soils, race and human evolution and to have discovered the key to the rise and fall of civilizations.

Trémaux was greater than Darwin!

With an unbounded enthusiasm which contrasted with the faint and condescending praise he had bestowed upon Darwin six years previously, Marx announced his find to Engels. He wrote his "Lieber Fred" on 7th August 1866: "A very important work which I shall send you (but under condition that you return it, since it is not my property) is P. Trémaux, *Origins and Transformations of Man and Other Beings*, Paris, 1865. It is, despite all the faults which strike me, a very important advance over Darwin." (Emphasis in the original.)⁷

At the beginning of his book, Trémaux revealed that he had discovered "THE GREAT LAW OF THE PERFECTING OF BEINGS," namely:

"THE PERFECTING OF BEINGS IS OR SHOULD BE PROPORTIONATE TO THE DEGREE THAT THE SOIL ON WHICH THEY LIVE IS WORKED! And, in general, the soil is more heavily worked to the extent that it belongs to a more recent geological formation."⁸

This "great law" revealed that the beauty, health, intelligence, energy and level of civilization of peoples corresponded directly to geological age of the land they occupied. Crude, brutish, stupid and lazy peoples and races lived on geologically old terrain. Refined, civilized, handsome, healthy, intelligent and energetic peoples lived on geologically new land.

Trémaux may have reached this odd conclusion from his observation of the prevalence of endemic goitre and its deforming effects in the Alps, a region of old granite soils. Two years before the appearance of Trémaux's book, Trousseau had shown conclusively that these goitres were caused by iodine deficiency, but Trémaux was either unaware of this or its significance eluded him.

⁷ Trémaux was just as condescending to Darwin as was Marx. One of Darwin's many errors was "to imagine a struggle for existence which destroys inferior individuals" (p. 238). *The Origin of Species* was "interesting," but not a "serious" work! (p. 14). Quotations here and below are from P. Trémaux, *Origines et transformations de l'homme et des autres êtres, Première partie*, Hachette, Paris, 1865.

⁸ Here and elsewhere, emphasis and capitalization are in the original.

To prove his theory, Trémaux took his readers on a rapid world tour, correlating soils and peoples as he proceeded:

In India, where the soil permits, one finds fairly handsome people, but in its peninsula, where there are large expanses of primitive soil . . . one sees people with black skins as hideous as monkeys who are given the same name as the latter (p. 28).⁹

Turning to Scandinavia, Trémaux observed that it contained "the greatest area of geologically primitive terrain in Europe." What followed with respect to its inhabitants? Why that "the Lapps are therefore the most inferior of people." The Swedes and Norwegians and Finns had not lived there long enough, but in time would degenerate to the Lapp level (p. 33).

This gave apparent scientific support to one of Marx's many bizarre beliefs. "Scandinavianism," he had written on 12th August 1848, "consists of enthusiasm for the brutal, dirty, piratical old-Norse nationality, for that deep inwardness which cannot bring its over-pregnant feelings out in words, but can in deeds, namely in brutality toward women, permanent drunkenness, and tearful sentimentality that alternates with berserk fury."

This unflattering evaluation of Scandinavian civilization may have been not unrelated to the fact that Prussia had marched troops into the province of Holstein to seize it from the Danes. German aggrandizement could be justified on the basis of the unfitness of Danes to govern their own territory.

The most favorable soils, according to Trémaux, were "all of the west and south of Europe and more especially France, Italy, Greece, part of Germany, southeast England and eastern Spain. It is there that civilization and the intellectual faculties rule" (p. 34).

All very well, except for such matters as the exclusion of the inhabitants of central and southern Germany where the soils were geologically older—that is to say, specifically, the exclusion of Rhinelanders such as Karl Marx himself.

On geological grounds, Trémaux had confined British civilization to the region around London. By implication, this excluded East Anglia and the Scottish Lowlands. Yet, four years later, Francis Galton would assemble persuasive evidence in *Hereditary Genius* (1869) for the proposition that the two latter regions were "a fraction of a grade superior to the ordinary English" in that they produced proportionately more eminent

⁹ Here as elsewhere, it is difficult to fathom what Trémaux is talking about. He may have had in mind the partially Australoid tribes of Kerala, such as the Uralis and Kadar.

men and a working class that was mentally, morally and physically superior to that of the rest of the British Isles.

One of Trémaux's most remarkable "scientific discoveries" was the reason for the supposedly debased condition of the Irish people. He claimed that, after the wars of 1641 and 1689, the English chased the native Irish into the barony of Flews, by the sea, on a granitic and very poor carboniferous soil." As a result, the English settlers preserved their original character, but the Irish were so changed that "except for their color, they would be taken for a backward population of Australian aborigines" (pp. 107-108).

Another discovery of this scientific genius was that Neanderthal skulls were "strongly reminiscent of the crania of monkeys" (p. 283). He also proclaimed that "the backward Negro is not an evolved ape, but a *degenerate man* . . ." (p. 31), a conclusion that fortified Marx's own prejudices.

Trémaux's most original finding was that the American Civil War was basically a geological struggle. The constitutional issues at stake and the incompatible attitudes of the contestants toward Negro slavery were merely surface phenomena. The real issue was that people who lived on recent soils did not want to be governed by people who lived on old ones. Trémaux wrote in 1864: —

What is the secret of this (Southern) resistance? Ask geology. She will show you that the South has a magnificent zone of soils, quaternary and tertiary. On the contrary, primitive silurian and coal-bearing soils predominate in the North. Here, therefore, the same principle as elsewhere: the inhabitants of geologically recent soils do not wish to be governed by those of ancient soils.

Even an eccentric as blind to the evidence as Pierre Trémaux realized that the North had overwhelming superiority in manpower and industrial output. Moreover, at the time of his writing, Grant was pounding Lee's armies to pieces in the battles of the Wilderness. Hence, Trémaux conceded the possibility of a Northern victory, but hastily added that, in that case, "we dare to predict that in the future it will be the South which will govern the North, assuming the two countries do not remain separate" (pp. 426-428).

Not all of Trémaux's vaporizings reinforced Marx's prejudices. Thus, the French ethnologist believed that the modern Greeks, living on the same new soils as their more illustrious ancestors, shared the physical beauty and quickness of wit of the latter.

Marx thought otherwise. He classified the Greeks as one of "the lousy Balkan peoples," adding: "These wretched, ruined fragments of one-time nations, the Serbs, Bulgars, Greeks and

other robber bands on behalf of which the liberal Phillistine waxes enthusiastic are unwilling to grant each other the air they breathe and feel obliged to cut each other's greedy throats."

Trémaux may have been a foolish man, but he was not an evil or a hate-obsessed man. He did not share the bloodthirsty visions of Marx and Engels. There is no reason to believe that he disliked Slavs or wished them harm. He merely believed that Russia's great areas of old soils inevitably created mediocre people. Moreover, if superior peoples settled there, the unfavorable geological environment would in time make them equally degenerate.

On geological grounds, he opposed russification of "poor Poland, which suffers most bitterly, as its geological frontiers with Muscovy are ever more vigorously invaded. The Slavic and Lithuanian races have their true frontier with the Muscovites in the great geological line that stretches north of the Niemen and Dnieper basins. In effect, the Slavs who crossed that border have been largely changed, brutalized say the other Slavs, who attribute this effect to the power of this or that prince. . . . But it is not at all the same south of this great geological line: the aptitudes and the types appropriate to this region will always remain entirely different from those of Russia. When they are in conflict with the great laws of nature, the projects of man are merely calamities, as witness the efforts of the Czars to transform the Polish people into Muscovites" (pp. 420-421).

Marx had supported Prussia's aggression against Denmark to devour Schleswig-Holstein by branding the Scandinavian Danes as inferiors—"dirty, piratical" Norse, addicted to drunkenness, wife-beating and berserk savagery. He defended "the right of civilization against barbarism, of progress against stability . . . this right is worth more than all treaties for it is the right of historic development."

Trémaux agreed that there was no analogy between Russian aggression against Poland and German aggression against Denmark. Since the Danes and Germans lived on similar soils, it made little difference which nation came out on top (pp. 422-423).

Trémaux pleased Marx by observing that the Hungarians lived on splendid, geologically recent land and were therefore superior to their Slavic neighbours. Writing in the *Neue Rheinische Zeitung* in 1849, Marx had argued that the Hungarians were a superior people who had every right to rule and oppress their Slavic neighbors: —

If the eight million Slavs have had to be satisfied to let four million Magyars keep them under their yoke, then this alone is enough to show which is the more capable of living and more energetic, the many Slavs or the few Magyars. It

turns out that this "crime" of the Germans and Magyars against the dubious Slavs is one of the best and most worthy acts of which our people and the Hungarians can boast.

In this analysis, Marx deliberately ignored the fact that the great landowners were Magyars, while the peasants and landless laborers were primarily Slavs. Extending Marx's argument that the fact that a minority ruled proved its superiority and therefore its right to wield power to the relationship between social classes would serve to justify the domination of the landed aristocracy and the merchants and industrialists over the workers. This passage is one of many which suggests that Techow may have been right when he stated that Marx had revealed to him that the only element in society for which he had any respect was the aristocracy, that he despised the working-class, and that he used the workers solely as a means to gain power.¹⁰

ENGELS REJECTS TREMAUX'S FANTASIES

On 7th August 1866, Marx explained to Engels why he found Trémaux's book exciting: —

In its historical and political applications, it is far more meaningful and fruitful than Darwin. Here is the only place where a basis in nature is provided for certain questions, such as nationality, etc.

Trémaux had proved that "on the basis of the predominant earth formation in Russia, the Slav must become tartarized and mongolized, just as he (he was long in Africa) proves that the common negro type is merely the degeneration of a far higher one. . . ."¹¹

Having discovered Trémaux, Marx abandoned Duchinski. It was no longer necessary to "prove" that the Russians were not Slavs to justify throwing them out of Europe. Trémaux had revealed that the fact that they occupied geologically old terrain had inevitably made them brutalized, degraded and inferior people who should be ruled by the superior Germans, Magyars and Poles.

Engels did not share his illustrious colleague's credulity in scientific matters. On August 7, Marx urged him to read

¹⁰ "I am convinced that a most dangerous personal ambition has eaten away all good in him. He laughs at the fools who parrot his proletarian catechism, just as he laughs over the communists *à la* Willich and over the bourgeoisie. The only people he respects are the aristocrats, the genuine ones, those who are well aware of their aristocracy. In order to prevent them from governing, he needs his own source of strength, which he can find only in the proletariat." Robert Payne, *Marx*, Simon and Schuster, New York, 1968, p. 288.

¹¹ Actually, Trémaux had "proved" nothing. His book consists of dogmatic assertions supported by "evidence," consisting of misstatements of fact or the vaguest sort of generalities.

Trémaux's "very important work." On the 13th, Marx again alluded to the subject. Finally, Engels got around to reading the book and on October 2 gave his "Dear Moor" his verdict:—

Concerning Moilin and Trémaux, I write more fully today: the latter I have not entirely finished reading, but am convinced that there is nothing to his theories, because he neither understands geology nor is capable of the most ordinary literary-historical criticism. The stories about the Nigger, Santa Maria, and about the transformation of whites into Negroes are laughable.¹² Namely, that the traditions of the Senegal niggers are worthy of unconditional belief *precisely because the fellows don't know how to write!* Beyond that, it is beautiful to attribute the difference between a Basque, a Frenchman, a Breton and an Alsatian to earth formation, which is doubtless also responsible for the fact that these people speak four different languages!

The way the fellow explains how we Rhinelanders on our Devonian transitional rocks (which have not been under water since long before the era of coal formation) did not become idiots and Niggers, he will perhaps show us in his second volume, or else assert, that we really are niggers.

This book is worth nothing, pure hypotheses that fly in the face of all the facts, and for every proof that it supplies, another proof must be adduced.

Best greetings to the ladies,

Dein

F. E.

It is worth noting that one of Engels's fundamental objections to the Trémaux theory was his belief that race differences in character and ability were permanent. If soil determined ability, then Swedes, Rhinelanders and Scots were destined to degenerate into idiots, whereas Negroes, living on the favorable soils of the American South, could develop into people of high intelligence and outstanding ability.

Marx failed to see that Trémaux's theories, far from supporting his own beliefs in fundamental and durable psychic differences, actually undermined them. On October 3, the day after Engels's devastating letter, Marx penned a rejoinder. Because they were ignorant of geology, Marx wrote, certain "German nature visionaries" who maintained that species could vary had been ridiculed by Cuvier. Yet they had been right and Cuvier wrong. Marx added:—

¹² The English word *Nigger* occurs in the original. Marx and Engels used it frequently to indicate their private opinion of a race they had to praise publicly. Where the correct German word, *Neger*, is used, it is translated here as *Negro*.

Trémaux's basic idea concerning *the influence of soil* . . . is, to my mind, an idea which merely has to be *uttered* to earn for itself an eternal citizenship in the sciences, and this independently of Trémaux's exposition.

Two days later, Engels wrote another crushing reply: —

You say that Cuvier threw ignorance of geology in the faces of the German nature philosophers when they asserted the variability of species and that they were right. But that had nothing to do with geology; when, however, someone presents a theory of variation of species based *exclusively on geology* and yet makes such geological extracts as to *falsify* the geology of entire countries (for example, Italy and even France) and, for the rest, takes his examples from those other countries about the geology of which we know practically nothing (Africa, central Asia), then it is something very different. As for the ethnological examples, those which deal generally with known countries and peoples are, almost without exception, false, either the geological premises or the conclusions drawn from them—and the many cases which point in the opposite direction he simply leaves out, for instance, the alluvial plains of inner Siberia, the enormous alluvial basin of the Amazon River, the entire alluvial land southward from la Plata to the southern tip of the Americas (east of the cordilleras).

That the geological structure of the earth has much to do with the soil on which things grow is an old story, just as the soil's capacity to bear vegetation has much to do with the plant and animal species that live upon it. That this influence has hardly been studied at all up to now is also true. But from that to the theories of Trémaux is a colossal leap.¹³

Marx did not reply. The two Engels letters apparently ended Marx's infatuation with the French pseudo-ethnologist. At least, there are no further references to Trémaux in the correspondence, nor did Marx succeed in finding substitute "scientific authority" for his race views. The road was thus paved for the subsequent presentation of Marx and Darwin as two great pioneers who pursued parallel paths in different scientific fields: the first laying bare the evolutionary laws of human society, the second those of biology. The road was also cleared for the convenient political myth that Marx and Engels were true internationalists who opposed the conquest and domination of weak peoples, nations and race by strong ones.

¹³ All quotations are my own translations from the German edition of the *Marx-Engels Briefwechsel*.

Notes on the Laetolil Find and Prehominid Racialiation

By NATHANIEL WEYL

In October 1975, anthropologist Mary Leakey announced that teeth and mandibles of 11 distinct hominids were found in volcanic ash beds in the East African Rift Valley about 25 miles south of the Olduvai Gorge. These finds have now been dated by stratification from 3.35 to 3.75 million years ago. The inference is that these large-brained, upright carnivores, who presumably ranged the savannas for a minimum time-span of 400,000 years, coexisted during that period with the more primitive *Australopithecus*. The Leakey find not only places the origins of *Homo erectus* almost a billion years further back in time than the 1972 discoveries of Richard Leakey (the son of Mary Leakey), but casts in doubt the theory that more advanced types of *Homo* systematically exterminated their more primitive contemporaries.

The Leakey discovery also sheds light on Carleton S. Coon's hypothesis of prehominid racialiation (that is to say, that human races evolved before the emergence of *Homo sapiens*), one which he cogently expounded in his 1962 volume, *The Origin of Races*, and which had been previously suggested by the late Franz Weidenreich. Coon's conjecture was received with unscholarly abuse and opprobrium by liberal anthropologists who feared that, if true, it would militate against the dominant ideological view that mankind is a single family and that racial differences are insignificant and superficial from an evolutionary standpoint.

It is rather early in the day to do more than offer tentative suggestions concerning the possible bearing of the most recent Leakey discoveries on the theory that mankind separated into distinct races before passing the *erectus* threshold and becoming *sapiens*. Since the Leakey discovery pushes back the origins of *Homo erectus* into even more distant frontiers of time, one might assume *a priori* that this made the Coon hypothesis improbable. However, the prehominid racialiation hypothesis does not concern the date when *Homo erectus* emerged from other *hominid* species, but rather the time when *Homo sapiens* arose from *Homo erectus*. This date is not in any way affected by the Laetolil discoveries.

What does seem most relevant is the inescapable conclusion that primitive and more advanced man-like types lived on the same continent for almost half a billion years. If this is a general rule, then the probability would seem considerable that Cro-Magnon man and Neanderthal man may have similarly coexisted

and interbred. The latter possibility seems reinforced by the discovery in Palestine of a Neanderthal skeleton in proximity to "modern Caucasoids" and other types "intermediate between both extremes."¹ If quantitatively significant interbreeding occurred among different types of prehomínids and *Homo erectus*, this could have resulted in different subspecies of hybrids from which the different races might have descended. Similar interbreeding between *erectus* and *sapiens* types would also provide a possible explanation for ración.

OUR CONTRIBUTORS

DONALD A. SWAN

I.A.A.E.E., P.O. Box 3495, Grand Central Station, New York, N.Y.
10017, U.S.A.

NATHANIEL WEYL

855 Oleander Street, Boca Raton, Florida 33432, U.S.A.

¹ Carleton S. Coon, *The Origin of Races*, Knopf, New York, 1962, p. 566.

Man, Ape or Big Foot ?

In the American Press there recently occurred the following news item which has been sent to us by Mrs Sylvia Castleton Weyl. We think it may be of interest to readers in view of papers published in this journal on the question of the Yeti.

(There is an omission in the printing of the item—which appeared in the *Los Angeles Herald-Examiner* on 8th January 1976—which concerns the diet of “Oliver” but we have printed the account as it appears, with the exception of the photography, which shows a far more intelligent creature than an ape.)

* * *

BEAST DEFIES DESCRIPTION

“Oliver has a bald pate even though he’s supposed to be only seven years old, and he has sharp pointed ears like Spock of TV fame.

“He’s hairy all over, but more hairy on his arms and legs than on his body. He stands very erect, and usually wears a grim expression. At least, that’s what Oliver looks like in the picture released here on Wednesday by Manhattan attorney Michael Miller, who claims to have purchased the “very strange creature” for \$8000 from an unidentified animal act in an unidentified upstate New York area.

“I have promised to protect everyone involved,” the 34-year-old Miller said in explaining why he’s so secretive about where Oliver came from.

“Miller says he plans to have Oliver put through various tests to determine whether he is an ape or a man-like creature—or even a young ‘Big Foot’.

“Big Foot is the creature who is America’s answer to the Abominable Snowman of the Himalayas, and his tracks have been reported so often there is now a Big Foot Information and Research Centre out in Oregon.

“Miller says he doesn’t think Oliver is a Big Foot, but that if he should turn out to be, his \$8,000 would turn out to be a pretty good investment.

Miller said after the tests on Oliver are completed, he plans to introduce him to the Press.

“... [line missing] vegetables, cheese and non-fatty meats.

“Oliver never walks on all fours, Miller says, and if he sees people sitting and talking, he may pull up a chair and sit down.

“But he doesn’t join in the conversation, Miller said. He just warbles.”

Journals Received

HUMAN BEHAVIOUR

Published monthly by Manson Western Corporation, Los Angeles, California 90025. Vol. 6, Nos. 3, 4, 1977. Price \$1.50.

JOURNAL OF INDO-EUROPEAN STUDIES

Published quarterly from 1785, Massachusetts Avenue, N.W., Washington D.C. 20036, U.S.A. Vol. 4, No. 1, 1976. Price \$18.00 a year.

THE PSYCHOLOGICAL RECORD

Published quarterly at Kenyon College, Gambier, Ohio 43022, U.S.A. Vol. 27, No. 1, 1977. Price \$3.00.

MATERIALY I PRACE ANTROPOLOGICZNE

Published by Zakład Antropologii Akademii Nauk, Wrocław, Breslaw. No. 92., 1976. Price 35 zlotys.

REVISTA DE ESTUDIOS POLITICOS

Published by the Instituto de Estudios Politicos, Madrid 8, Spain. No. 211, 1977. Price \$3.50.

NEUE ANTHROPOLOGIE

Published quarterly by Gesellschaft für Biologische Anthropologie Eugenik und Verhaltensforschung, Hamburg, West Germany. Vol. 5, No. 1, 1977.

RENDICONTO DELL'ACCADEMIA DELLE SCIENZE

Published by Società di Scienze, Lettere E Arti, Napoli. Vol. XLIII, 1976.

ETHNIC GROUPS

Published quarterly by Gordon and Breach Science Publications Ltd., 41-42 William IV Street, London WC2. Vol. 1, No. 1, 1976. Price £10 for four issues.

ANTROPOLOGICA

Published by Instituto Caribe de Antropologica Y Sociologica, Apartado 8150, Caracas 101, Venezuela. Price \$5.00.

ABHANDLUNGEN UND BERICHTE DES STAATLICHEN MUSEUMS FÜR VOLKERKUNDE DRESDEN

Published by Akademie-Verlag, Berlin. Band 35, 1976.

LOS HIDALGOS DE GUATEMALA

By Pilar Sanchiz Ochoa. Published by Departamento de Antropología y Etnología de América, Universidad de Sevilla. Pp. 194. Vol. 13. 1976. \$7.00.

PSYCHOLOGICA AFRICANA

Published by National Institute for Personal Research, Johannesburg 2000. Vol. 17, No. 1, 1977. Price R5.00 per volume of three issues.

INTERNATIONAL SOCIAL SCIENCE JOURNAL

Published quarterly by U.N.E.S.C.O., Paris. Vol. XXIX, 1977.

THE AMERICAN MERCURY

Published quarterly from P.O. 1306, Torrance, California 90505, U.S.A. Vol. CXIII, No. 524, 1977. Price \$2.00.

ALASKA

Monthly journal published by Alaska Northwest Publishing Company, Anchorage, Alaska. Vol. XLIII, Nos. 3, 4, 5, 1977. Price \$1.00.

POPULATION

Revue Bimestrielle de l'Institut National d'Etudes Démographiques, Paris. Vol. 32, No. 2, 1977. Price F. 22.00.

ACTA BIOLOGICA

Published by Acta Universitatis Szegediensis, Szeged, Hungary. Vol. XXII, No. 1-4, 1976.

FOLKLORE

Published monthly by Indian Publications, 3 British India Street, Calcutta. Vol. 18, Nos. 1, 2, 1977.

Book Reviews

GROW OR DIE!

By James A. Weber. Arlington House Publishers, New Rochelle, N.Y., 1977. Pp. 255. Price \$11.95.

This book argues that the claim of zero population growth advocates that the United States is overpopulated is nonsense. It argues that their recipe is one for stagnation, the evanescence of American power, and the twilight of American freedom.

Now I happen to agree that the flight of European man from fertility is an ominous indication of civilizational decay and that every effort should be made to reverse this trend. The main reason is that European man, including those of us born in overseas areas of European settlement naturally, is the primary creator of modern civilization. For better or worse, we are the main carriers and developers of that civilization. Should we condemn ourselves to biological extinction, the fate of civilization would probably rest in the hands of the other large group of highly intelligent and creative peoples—the Mongoloids of Japan and perhaps China. They would conceivably do a better job than we have. They deserve our good wishes, but there is no good reason why we should retire from the scene and leave the burden entirely to them.

But, unfortunately, Mr Weber does not see that the issue is precisely that of the *quality* of populations, of a direction of Darwinian selection such that the more intelligent, innovative and creative peoples should multiply and cover the earth.

In fact, he explicitly condemns population control advocates for taking the *e* out of equality. To him, it would seem, everybody who fits biologically into the species *Homo sapiens* is of equal value.

With this populist approach—one that is popular in the U.S. today in the era of corn-pone and peanut democracy—it is inevitable that he should proclaim absurdities. We learn that “the history of the past few centuries constitutes a complete refutation of Malthus’s views,” that “the ideology of population control is ultimately a moral aberration resulting from man’s turning away from God . . .” and so forth. The book is filled with beguiling arguments, industriously buttressed with evidence, which often unfortunately miss the point.

Yet this book has enough valuable material in it to make it well worth reading. Weber blasts the argument that the United States is today overpopulated. He shows that the Cassandras of ZPG have underestimated our raw materials resources and been proved wrong by events. He demonstrates, to my mind cogently, that the environmentalists’ chant of doom on ecology misreads the historic record. On balance, man has been a pollution eliminator. The contrast between Nature and Artifice, which seems to be part of the naive Rousseauian *Weltanschauung* of the self-appointed friends of the earth is as ridiculous as the Noble Savage. All this is supported by a wealth of factual evidence admirably presented.

Mr Weber has done his readers an additional service. He has pointed to some of the inhuman, totalitarian and—to put it plainly—vicious proposals which some zero population growth advocates have sought to foist on the American people as social reforms. Kingsley Davis is quoted as making the evil suggestion that the state force unmarried pregnant women to abort their fetuses. Planned Parenthood-World Population entertains as possibilities compulsory sterilization of every parent of two children and governmental encouragement of homosexuality! Martha K. Willing, treasurer of Population Dynamics, proposed that parents of a third child should be forced to present themselves to Big Brother for

sterilization, failing which their child should be sterilized. Some of the people quoted seem to combine a pathological hatred of children with a desire to force the American middle class and intelligentsia to commit biological hara-kiri. One regrets that their parents were not all third children in the Martha Willing utopia.

NATHANIEL WEYL

THE HUNTING HYPOTHESIS

By Robert Ardrey. Atheneum, 1976. Pp. 242. Price \$10.00.

Ardrey's latest book co-ordinates the available evidence in support of the significant generalizations concerning human evolution which he has advanced over the past 15 years. Since the publication of *African Genesis*, field studies by Goodall, Kruuk, Mech, Schaller and Turnbull; skeletal discoveries by the Leakeys, Johanson and Howell, and the theoretical and synthesizing works of Clark, Cole, Darlington, Washburn, De Vore and Wilson have reinforced some of Ardrey's insights and helped transform heresy into established dogma.

A central thesis of the present volume is: "Man is a man, and not a chimpanzee, because for millions upon millions of evolving years we killed for a living."

The forced transition of our remote ancestors from arboreal life and a largely vegetarian diet during the Pliocene drought gave them bipedal stance, caused changes in skeletal and foot structure, made them hunters and carnivores, fathered the invention of weapons, and encouraged the growth of brain. A sexual revolution marked by year-round female availability for sex and breeding strengthened the family bond and the sexual differentiation of roles. As predators, we developed such traits as co-operation, courage, and sacrifice of the individual for group survival.

The glacial challenge is depicted as central to the mental and social development of *Homo sapiens*. Originally harnessed to keep man warm in the intense cold of the ice ages, fire became a basic instrument of socialization and a milestone of evolution. It stimulated the development of language and religion. With the evolution of speech, hunting bands could expand into large aggregations under a single command, capable of firedriving mammoth and oryx into cul-de-sacs and over cliffs.

A plausible, but unstated, implication is that those races which remained in regions little affected by glaciation lacked the incentive to create fire (though they probably utilized existing fires) and hence missed a fundamental stage in the transformation of manlike bipeds into human beings capable of creating civilizations.

Ardrey sees the Neolithic Revolution as a direct response to the recession of the glacial ice in the North Temperate Zone some 12,000 years ago. This made whole continental regions suitable for tillage. Mastery of fire, enabling our ancestors to make grains and legumes readily digestible through cooking, was another catalyst. The time-span between glacial recession and Neolithic Revolution may have been devoted to the restoration of formerly ice-covered lands to climax vegetation and to the expansion of human numbers from the hunting bands that created the Lascaux cave paintings to the millions needed for the irrigation civilizations.

Ardrey's new book summarizes a great deal of tantalizing new research and work in progress on the frontiers of the several sciences cognate to the study of the origins of man. The book is marred by an excessively exuberant style and by Ardrey's tendency to describe processes in terms of simple cause and effect rather than casual interaction and positive feedback. *The Hunting Hypothesis* is rich in insights and speculations. It is perhaps more important for the questions it asks than for the answers it proffers.

NATHANIEL WEYL

DAS OFFENBARTE LEBEN

By F. Ritter

I. Bd. Lebensschöpfung und Vernunftfrevel, 344 S. DM 20

Life on this planet now and through the millions of years of evolution and coming extinction of mankind.

II. Bd. Schmarotzerzüchtung und Erbpferung, 247 S. DM 15

Parasitism and disease, and the development of parasites and diseases.

III. Bd. Nietzsche, der gerechtfertigte Seher, 585 S. DM 32

Nietzsche's vision, his insight into mankind's true predicament, for the first time revealed and explained and demonstrated in detail. "The True Book of Philosophy."

By encompassing all the vital facts of our world and mankind, it constitutes the true scientific biological book in the world and makes our situation thoroughly and perfectly clear.

Without its insights, no human future is possible.

Der Biologe f. Ritter bringt die für uns lebenswichtigen, aber der Öffentlichkeit noch weitgehend unbekannten, erbbiologischen Erkenntnisse und die daraus zu ziehenden Schlußfolgerungen in verständlicher Form. Verantwortungsbewußte werden vor Entscheidungen gestellt, wenn sie nicht ihre Nachkommen in den körperlichen, geistigen und seelischen Untergang geraten lassen wollen, der von gewissenlosen Machtgruppen und Ideologien der Masse als Fortschritt gepriesen wird.

Halbleinen 24 x 17 cm. Bände auch einzeln lieferbar.

Zu beziehen von:

F. Ritter Verlag,
D — 3119 Tötendorf,
Eichenhof,
Deutschland.

Also obtainable from:

European Printing and Publishing
Company Limited,
92-94 Gray's Inn Road,
London, W.C.1.

Das Buch, ohne dessen Erkenntnisse keine Menschengeschichte möglich ist!

Reprints of interest to the Genealogist

S. R. Publishers here offer some titles from their range of reprints which will appeal to those with an interest in the field of genealogy. These are beautifully prepared facsimile reprints of rare works, for long out of print and virtually unobtainable.

History, Directory and Gazetteer of the County of York

by Edward Baines

Published: Leeds Mercury, 1822-1823. Reprinted with new introductory notes by Owen Ashmore. A directory, listing population, professions and notable inhabitants of the various towns, cities and villages in Yorkshire.

pp. 654 + cxliv and 656. 2 volumes

£3.15
per volume

John Speed's Atlas of Wales

(Part II of 'The Theatre of Great Britaine')

Published: London, 1676. This is an exact facsimile of the 1676 edition. Probably the greatest British cartographer ever, Speed's work is still available in many formats but this will be the first time that his complete Atlas of Wales has been available again for over 250 years.

pp. 64

£5.25

Birmingham Inventors and Inventions

by R. B. Prosser

Published: Birmingham, 1881, Journal Printing Works. Originally published in an edition of only 50 copies, this is probably the rarest book on Birmingham. The new work includes an introduction by Professor Asa Briggs, Vice-Chancellor of Sussex University.

pp. 264.

£2.50

Place Names of Scotland

by Rev. J. B. Johnston

A reprint from the 1934 edition. Probably the most important work of this well-known philologist.

pp. 352.

£3.50

Full lists and details available from:



S. R. Publishers Limited

East Ardsley, Wakefield, Yorkshire

NOUVELLE ECOLE

REVUE DE RECHERCHE ET D'ETUDES SUR LA
CIVILISATION EUROPEENNE

Parmi les textes publiés récemment: *Konrad Lorenz et l'ethologie moderne*, by Alain Benoist; *Le mythe du hasard*, by Marc Beigbeder; *Des fondements de l'Etat libre d'Islande: trois siècles de démocratie médiévale*, by Frédéric Durand; *Présence de Montherlant*, by Gabriel Matzneff and Pierre Pascal; *La langue comme destin*, by Friedrich Sieburg.

NOUVELLE ECOLE

B.P. 129/75326 — PARIS-CEDEX 07 (FRANCE)

Abonnement: simple (1 an—4 no.): 95 F—étranger: 110 F—
de soutien: à partir de 150 F.

Spécimen gratuit sur demande.

MANNUS — ZEITSCHRIFT FÜR DEUTSCHE VORGESCHICHTE

begründet 1909 von Gustaf Kossinna,
herausgegeben von Dieter Korell.

Mannus berichtet viermal jährlich in vielen Aufsätzen und Besprechungen über germanische Geschichte und über die Vorzeit Europas.

Ständige Mitarbeiter sind unter vielen anderen die deutschen Wissenschaftler: Prof. Dr. Bolko Frhr. von Richthofen, Dr. Heinz-Joachim Graf, Dr. Alexander Leyden, Prof. Dr. Peter Zylmann, Dr. Hage W. Hansen.

Mannus wird herausgegeben in Verbindung mit der Deutschen Gesellschaft für Vor- und Frühgeschichte. Der Jahresbezugspreis ist DM 36.-, andere Währungen entsprechend.

Ihre Bestellung richten Sie bitte an:

Mannus-Verlag, D 53 Bonn 1, Postfach 97, Westdeutschland.

More Ethnological Elements of Africa

By R. GAYRE OF GAYRE

This book is a sequel to *Ethnological Elements of Africa* (still in print priced £1.40) and contains further essays on African ethnology reprinted from *THE MANKIND QUARTERLY*. The essays do not set out to deal in detail with every aspect of this vast subject but attempt to synthesise the major racial elements of Africa, to indicate their relationships and differences, and to formulate a theory of the racial origins of the African populations of our times.

149 pages £3

THE ARMORIAL

1 DARNAWAY STREET, EDINBURGH. EH3 6DW
SCOTLAND

Miscellaneous Racial Studies 1943-1972

By R. GAYRE of GAYRE

in two volumes

Volume I 1943-1956 ● Volume II 1957-1972

Price £3 per volume

These two volumes consist of papers and lectures written over a period of nearly thirty years. They indicate the author's steadily evolving concept of the three basic stocks of mankind which he has since come to enunciate more and more as editor of *The Mankind Quarterly*.

THE ARMORIAL

1 DARNAWAY STREET, EDINBURGH, EH3 6DW
SCOTLAND

The Syro-Mesopotamian Ethnology

as Revealed in Genesis X

By R. GAYRE OF GAYRE

The writer of the tenth chapter of Genesis is the father of ethnology. There are in the Church today many elements which consider that the tenth chapter of Genesis has no connection with modern ideas. The author in a detailed analysis shows that chapter ten is indeed relevant to us today. He concludes that Genesis X does not support a mongenetic origin for man and was a serious attempt to classify the races with which the account was concerned on a definite genetic basis.

64 pages — £1.50

THE ARMORIAL

1 DARNAWAY STREET, EDINBURGH, EH3 6DW
SCOTLAND

The Origin of the Zimbabwean Civilisation

By R. GAYRE OF GAYRE

In this profusely illustrated book the author rejects the Phoenician, Moslem and Bantu theories for the origins of the Zimbabwean civilisation, and demonstrates that the Zimbabwean development of Rhodesia was due to the pre-Moslem Arabs, assisted by Indians, Ethiopians, and perhaps Malays and Chinese. He concludes that the ideas of a school of thought which claims that the ruins are recent in origin and are to be called "African," thereby inferring that they are the work of the Bantu, are pure myth.

248 pages, 15 colour plates, 80 black-and-white photographs,
12 maps and ground plans.

Price: R\$9.00

COLLEGE PRESS (PVT) LTD

P.O. BOX 3041, SALISBURY, RHODESIA

GENUS

The official publication of the

ITALIAN COMMITTEE FOR THE STUDY OF POPULATION PROBLEMS

*Published under the auspices of
the National Research Council*

Editor: NORA FEDERICI

The Scientific Committee of *Genus* is composed of the members of the Technical Committee of the Italian Committee for the Study of Population Problems: V. Castellano, University of Rome; P. Fortunati, University of Bologna; G. Genna, University of Rome; G. L'Eltore, University of Rome; G. A. Maccacaro, University of Milan; I. Scardovi, University of Bologna; and Nora Federici (President).

Vol. XXX, 1974, includes: Applications of the Correspondence Analysis to a Fertility Survey in Algeria, by Leon Tabah; Effects of Different Patterns of Migration on Age Structure and on Fertility, by Antonio Santini; On the Validity of Results in the Studies of Historical Demography, by Giuseppe Leti; Isolate Size and the Matrimonial Structure of the Population of the Aeolian Islands, by F. Conterio, O. Rossi and L. Soliani; Influence of Education on Fertility in Italy, by Luciano Ciucci and Anna De Sarno Prignano.

The annual subscription to *Genus* is \$10.00 (or equivalent), and subscriptions should be sent to: Segreteria del Comitato Italiano per lo Studio dei Problemi della Popolazione, Via Nomentana, 41-00161 Rome, Italy.

THE MANKIND QUARTERLY

SUBSCRIPTION RATES

Single issue — £1.50 (\$3.00); annual subscription (4 issues) — £5 (\$12.00); three-year subscription (12 issues) — £14 (\$35.00). Post free by surface mail. Copies will be sent by air mail on payment of an extra £3 (\$7.00) per year or 70p (\$2.50) per copy. Back numbers are supplied while available at £1.50 (\$3.00) each. No responsibility can be accepted for copies lost in the post after dispatch.

CONTRIBUTIONS

All material submitted for publication in THE MANKIND QUARTERLY must be fully and finally corrected, and must be in clear, double-spaced typing, preferably in triplicate. All papers must be accompanied by a summary of not more than 100 words.

The Editors do not accept responsibility for the views expressed by individual contributors.

PAYMENT TO AUTHORS

Authors of articles published in THE MANKIND QUARTERLY are now paid at the rate of one guinea or \$2.50 per printed page, and they also receive ten free copies of the issue concerned.

1 DARNAWAY STREET, EDINBURGH. EH3 6DW
SCOTLAND